



TEXTILES COMMITTEE

Infrastructure Requirements - Machine to Trainee ratio

**RESOURCE SUPPORT AGENCY
UNDER SAMARTH**

Sr. No	Name of the Module	Course Code	Machine/Tools/Equipments Requirement	Machine/Tools/Equipments to Trainee Ratio
1.	Embroidery Machine Operator	TC GMT 01	Embroidery Machines	Machine to trainee ratio 1:2
2.	Fuser & Ironer	TC GMT 02	1. Ironing table 2. Steam iron with steam attachment 3. Fusing machine	1. Ironing table – Machine to trainee ratio 1:3 2. Steam iron with steam attachment - Machine to trainee ratio 1:3 3. Fusing machine- Machine to trainee ratio 1:10
3.	Computer Embroidery Machine Operator	TC GMT 03	Minimum six head computer embroidery machine along with computer and required supporting software	Machine to trainee ratio 1:15
4.	Garment Checker	TC GMT 04	Inspection table (minimum size 60X40 inches)	Machine to trainee ratio 1:5
5.	CAD Operator	TC GMT 05	1. Computer set with CAD software 2. Digitizing board 3. Printers / plotters	1. Computer set with CAD software – Machine to trainee ratio 1:15 2. Digitizing board – Machine to trainee ratio 1:30 3. Printers / plotters –



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				Machine to trainee ratio 1:30
6.	Sewing Machine Operator	TC GMT 06	1. Industrial Sewing Machine 2. Buttonhole and buttoning machines for demo purpose	1. Sewing Machines: Machine to trainee ratio 1:2 2. Buttonhole and buttoning machines for demo purpose: Machine to trainee ratio 1:15
7.	Pattern Maker	TC GMT 07	Table for Pattern Making (minimum size 60X40 inches)	Machine to Trainee ratio 1:5
8.	Fabric Checker	TC GMT 08	1. Checking table (minimum size 64X40 inches) 2. Fabric inspection machine	1. Checking table – Machine to Trainee ratio 1:5 2. Fabric inspection machine – Machine to Trainee ratio 1:10
9.	Fabric Cutter	TC GMT 09	Cutting machines – straight/bend/circular	Machine to Trainee ratio 1:10
10.	Overlock & Flatlock Machine Operator	TC GMT 10	1. Overlock Stitching machines with accessories 2. Flatlock Stitching machines with accessories	Machine to Trainee ratio 1:4
11.	Sewing Machine Mechanic	TC GMT 11	Sewing machine, Over lock machine, Flat lock machine, Feed of the arm machine, Bartack	Machine to Trainee ratio 1:10 (for respective machines)



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			machine, Button stitch machine, Button hole machine	
12.	Cutting Supervisor	AMH/Q0610	1. Straight Cutter 2. Rotary Cutter 3. Side/End Cutter 4. Cutting Table (Minimum size 100X60 inches) 5. Auto CAD (Optional) 6. CAM Machine (Optional)	1. Straight Cutter- Machine to trainee ratio : 1:10 2. Rotary Cutter- Machine to trainee ratio: 1:10 3. Side/End Cutter- Machine to trainee ratio: 1:10 4. Cutting Table (Minimum size 100X60 inches) – Machine to trainee ratio: 1:10 5. Auto CAD (Optional) - Machine to trainee ratio: 1:30 6. CAM Machine (Optional) - Machine to trainee ratio: 1:30
13.	Record Keeper	AMH/Q1920	1. Computer / Laptop 2. Printer 3. Photocopier/Xerox Machine 4. Colour Matching Cabinet (Light box)	1. Computer / Laptop – Machine to trainee ratio: 1:5 2. Printer – Machine to trainee ratio: 1:10 3. Photocopier/Xerox Machine – Machine to trainee ratio: 1:30 4. Colour Matching Cabinet (Light box) – Machine to trainee ratio: 1:30
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14.	Sewing Machine Operator Knits	AMH/Q0305	1. Industrial Sewing Machines 2. Overlock (4 thread OR 5 thread) 3. Flatlock Machine	1. Industrial Sewing Machines - Machine to trainee ratio: 1:5 2. Overlock (4 thread OR 5 thread) - Machine to trainee ratio: 1:5 3. Flatlock Machine: 1:5
15.	Store Keeper	AMH/Q0501	1. Computer / Laptop 2. Printer 3. Photocopier/Xerox Machine	1. Computer / Laptop - Machine to trainee ratio: 1:5 2. Printer - Machine to trainee ratio: 1:10 3. Photocopier/Xerox Machine - Machine to trainee ratio: 1:30
16.	Export Executive	AMH/Q1602	1. Computer / Laptop 2. Printer 3. Photocopier/Xerox Machine	1. Computer / Laptop - Machine to trainee ratio: 1:2 2. Printer - Machine to trainee ratio: 1:10 3. Photocopier/Xerox Machine - Machine to trainee ratio: 1:30



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17.	Layerman	AMH/Q0201	1. Fabric Laying Table (Minimum size 250X50 inches) 2. Fabric Roll Stand	1. Fabric Laying Table (Minimum size 250X50 inches): Machine to Trainee ratio- 1:30 2. Fabric Roll Stand: Machine to Trainee ratio- 1:30
18.	Circular Knitting Machine Operator	TC KNT 01	Circular Knitting Machine	Machine to trainee ratio 1:10
19.	Warp Knitting Machine Operator	TC KNT 02	Warp Knitting Machine	Machine to trainee ratio 1:15
20.	Crochet Machine Operator	TC KNT 03	Crochet Machine	Machine to trainee ratio 1:30
21.	Junior Supervisor - Crochet Machine	TC KNT 04	Crochet Machine	Machine to trainee ratio 1:30
22.	Knitting Machine Operator – Flat Bed Knitting	TSC/Q4102	Flat Bed Knitting Machine	Machine to trainee ratio 1:15
23.	HTHP Cheese Dyeing Machine Operator	TC PRC 01	1. HT-HP Cheese Dyeing machine 2. One crane for shifting bobbin carrier 3. Hydro extractor (Desirable)	1. HT-HP Cheese Dyeing machine:- Machine to Trainee ratio 1:15 2. Hydro extractor (Desirable):- Machine to Trainee ratio 1:30
24.	Singeing Machine Operator	TC PRC 02	Fabric Singeing Machine	Machine to trainee ratio 1:30
25.	Desizing Machine Operator	TC PRC 03	Fabric Desizing Machine	Machine to trainee ratio 1:30



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26.	Continuous Bleaching Range Machine Operator	TC PRC 04	Continuous Bleaching Range	Machine to trainee ratio 1:30
27.	Mercerizing Machine Operator	TC PRC 05	Fabric Mercerizing Machine	Machine to trainee ratio 1:30
28.	Jigger Machine Operator	TC PRC 06	Jigger Machine of any type like Jumbo or hooded etc	Machine to trainee ratio 1:30
29.	Stenter Machine Operator	TC PRC 07	Stenter Machine	Machine to trainee ratio 1:30
30.	Calendering Machine Operator	TC PRC 08	Calendering Machine	Machine to trainee ratio 1:30
31.	Zero Zero Finishing Machine Operator	TC PRC 09	Zero Zero Finishing Machine	Machine to trainee ratio 1:30
32.	Winch Dyeing Machine Operator	TC PRC 10	Winch Dyeing Machine	Machine to trainee ratio 1:30
33.	Soft Flow Dyeing Machine Operator	TC PRC 11	Soft Flow Dyeing Machine	Machine to trainee ratio 1:30
34.	Compacting Machine Operator	TC PRC 12	Compacting Machine	Machine to trainee ratio 1:30
35.	Washing Operator (Denim)	TC PRC 13	Washing Machine, Hydroextractor, Drier, Work station fitted with pant leg shaped strong wooden flat, Design pattern made up of rubber material, Compressed air with pressure, Work station Mounted Horizontal to the surface level - Fitted with Two M.S.pipe,	Machine to trainee ratio 1:30



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			each pipe per leg of the Jeans pant and both end of each pipe covered by the Rubber tube / sheet & tighten by suitable clamping. complete set is attached to the semi-rotary mechanism, Grinding Machine, Grinding wheel, Tacking Machine/Hand Tacking gun, Pressure tank for spraying, fitted with pressure indicator & Regulator.	
36.	Rotary Printing Machine Assistant Operator	TC PRC 14	Rotary Printing Machine	Machine to Trainee ratio 1:30
37.	Rotary Printing Machine Operator	TC PRC 15	Rotary Printing Machine	Machine to Trainee ratio 1:30
38.	Assistant Printing Paste Maker	TC PRC 16	1. Container (Metallic/steel) for storage of print paste 2. Burners 3. Weighting balance 4. Industrial Stirrer / Thickening Preparation System	1. Container (Metallic/steel) for storage of print paste: Machine to Trainee ratio 1:10 2. Burners: Machine to Trainee ratio 1:10 3. Weighting balance: Machine to Trainee ratio 1:30 4. Industrial Stirrer / Thickening Preparation System: Machine to Trainee ratio 1:30



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39.	Handloom Weaver (Frame Loom)	TC HLM 01	Handloom Machine	Machine to Trainee ratio 1:5
40.	Assistant Hand Dyeing Operator	TC HLM 02	Dye Bath/Dyeing Vat and burners	Machine to Trainee ratio 1:5
41.	Assistant Hand Block Printing	TC HLM 03	In case of production units existing facility of blocks and printing table and in case of other Training Institutes printing table with blocks of different design and suitable no. of washers and boiler for steaming	Machine to Trainee ratio 1:4
42.	Assistant Dobby Handloom Weaver	TC HLM 04	Dobby Handloom	Machine to Trainee ratio 1:5
43.	Jacquard Handloom Weaver	TC HLM 05	Jacquard handloom	Machine to Trainee ratio 1:5
44.	Assistant Handloom Weaver - Two Treadles	TC HLM 06	Handloom Two Tradles Machine	Machine to Trainee ratio 1:5
45.	Assistant Handloom Weaver - Multi Treadles	TC HLM 07	Handloom Multi Tradles Machine	Machine to Trainee ratio 1:5
46.	Assistant Handloom Weaver - Draw boy or Jala	TC HLM 08	Handloom - Draw boy/Jala loom	Machine to Trainee ratio 1:5
47.	Handloom Weaver (Advance) – Dobby	TC HLM 09	Dobby Handloom	Machine to Trainee ratio 1:5
48.	Handloom Weaver	TC HLM 10	Jacquard Handloom	Machine to Trainee ratio 1:5



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	(Advance) - Jacquard			
49.	Assistant Handloom Designer (Manual)	TC HLM 11	Handloom	Machine to Trainee ratio 1:5
50.	Assistant Handloom Hand Dyer	TC HLM 12	1. Dyeing Container (Metallic/steel) 2. Burners 3. Dying Utensils Set	Machine to Trainee ratio 1:5
51.	Assistant Handloom Hand Block Printer	TC HLM 13	1. Printing Table 2. Printing Blocks 3. Dyeing Container (Metallic/steel) 4. Burners 5. Dying Utensils Set	Machine to Trainee ratio 1:10
52.	Electroplating and Effluent Treatment Assistant	TC MET 01	1. Buffering, Grinding & Polishing machine 2. Electro plating relevant line tanks 3. Effluent Treatment plant	1. Buffering, Grinding & Polishing machine (Machine to Trainee ratio 1:10) 2. Electro plating relevant line tanks (Machine to Trainee ratio 1:4) 3. Effluent Treatment plant
53.	Assistant Engraver - Metal Handicrafts	TC MET 02	Engraving equipments [Working Table (Tripod Stand), Engraving Kalam and Hammers]	Machine to Trainee ratio 1:1
54.	Lacquering and Painting Assistant	TC MET 03	1. Buffering, Grinding & Polishing machine	1. Buffering, Grinding & Polishing machine



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			2. Degreasing machine 3. Spray booth 4. Spray Gun 5. Oven with backing 6. Fresh Air System/Compressor	(Machine to Trainee ratio 1:10) 2. Degreasing machine (Machine to Trainee ratio 1:30) 3. Spray booth (Machine to Trainee ratio 1:30) 4. Spray Gun (Machine to Trainee ratio 1:30) 5. Oven with backing (Machine to Trainee ratio 1:30) 6. Fresh Air System/Compressor (Machine to Trainee ratio 1:30)
55.	Assistant Packaging	TC MET 04	Packaging machine (Sealing Equipments, Strapping equipments, wrapping machine, coding and labeling equipment)	Machine to Trainee ratio 1:30
56.	Assistant Powder Coater - Metal Handicrafts	TC MET 05	1. Pre treatment line of tanks for Phosphating / chromating 2. Dryer Oven 3. Spray booth 4. Powder Spray Gun 5. Curing Oven with backing	1. Pre treatment line of tanks for Phosphating / chromating (Machine to Trainee ratio 1:4) 2. Dryer Oven (Machine to Trainee ratio 1:30) 3. Spray booth (Machine to



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			6. Fresh Air System/Compressor	Trainee ratio 1:30) 4. Powder Spray Gun (Machine to Trainee ratio 1:30) 5. Curing Oven with backing (Machine to Trainee ratio 1:30) 6. Fresh Air System/Compressor (Machine to Trainee ratio 1:30)
57.	Assistant Quality Controller - Metal Handicrafts	TC MET 06	Facility of testing lab which comprises testing equipments like Toxic Metal testing, drop tester, moisture meter and corrosion Resistance testing, Salt Spray unit, etc.	Machine to Trainee ratio 1:30
58.	Assistant Computer Aided Designer - Metal Handicrafts	TC MET 07	Computer system installed with CAD software	Machine to Trainee ratio 1:2
59.	Assistant Welding and Soldering - Metal Handicrafts	TC MET 08	1. Welding Machine 2. Soldering Equipments	1. Welding Machine (Machine to Trainee ratio 1:10) 2. Soldering Equipments (Machine to Trainee ratio 1:2)



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60.	Carving Artisan - Stonecraft	HCS/Q1502	1. Sanding / Buffing Machine 2. Marble Cutting Machine 3. Hand Cutter Machine	1. Sanding / Buffing Machine (Machine to Trainee ratio 1: 10) 2. Marble Cutting Machine (Machine to Trainee ratio 1: 10) 3. Hand Cutter Machine (Machine to Trainee ratio 1: 15)
61.	Inlay Artisan – Stonecraft	HCS/Q1504	Buffing Machine	Machine to Trainee ratio 1: 10
62.	Casting Operator (Metal Handicrafts)	HCS/Q2801	1. Furnace 2. Drill Machine	1. Furnace (Machine to Trainee ratio 1: 30) 2. Drill Machine (Machine to Trainee ratio 1: 15)
63.	Engraving and Stamping Artisan <i>Elective:1- Engraving Artisan (Metal Handicrafts)</i>	HCS/Q2802	1. Surface Grinder 2. Buffing Machine 3. Chisels set 4. Hammer set	1. Surface Grinder - Machine to Trainee ratio 1:15 2. Buffing Machine - Machine to Trainee ratio 1:15 3. Chisels set -Machine to Trainee ratio 1:5 4. Hammer set -Machine to Trainee ratio 1:5



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	Engraving and Stamping Artisan <i>Elective:2- Stamping Operator (Metal Handicrafts)</i>	HCS/Q2802	Stamping Machine	Machine to Trainee ratio 1: 10
64.	Paper Mache Products Artisan	HCS/Q4401	1. Putty Mixer 2. Hand Grinder 3. Compressor Machine	1. Putty Mixer (Machine to Trainee ratio 1: 10) 2. Hand Grinder (Machine to Trainee ratio 1: 5) 3. Compressor Machine (Machine to Trainee ratio 1: 30)
65.	Engraving/Carving/Etching Assistant	HCS/Q7001	Trimming Tool	Machine to Trainee ratio 1: 2
66.	Traditional Hand Embroiderer <i>Electives:1- Phulkari Embroidery</i>	HCS/Q7301	Embroidery Frame/Hoops (round and square)	Embroidery Frame/Hoops (round and square) (Machine to Trainee ratio 1: 1)
	Traditional Hand Embroiderer <i>Electives:2 -Chikankari Embroidery</i>	HCS/Q7301	Embroidery Frame/Hoops (round and square)	Embroidery Frame/Hoops (round and square) (Machine to Trainee ratio 1: 1)
	Traditional Hand Embroiderer <i>Electives:3- Zari-Zardosi Embroidery</i>	HCS/Q7301	Embroidery Frame/Hoops (round and square)	Embroidery Frame/Hoops (round and square) (Machine to Trainee ratio 1: 1)



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67.	Hand Crochet Lace Maker	HCS/Q7703	Lace Making /Crochet tools	Machine to Trainee ratio 1: 1
68.	Crochet Lace- Supervisor	HCS/Q7704	Sewing Machine	Machine to Trainee ratio 1: 4
69.	Crochet Lace Tailor	HCS/Q7705	Tailoring (Sewing) Machine	Machine to Trainee ratio 1: 4
70.	Bamboo Work Artisan <i>Electives:1 - Bamboo Basket Maker</i>	HCS/Q8702	1. Bamboo splitting tools 2. Hand saw	1. Bamboo splitting tools (Machine to Trainee ratio 1: 3) 2. Hand saw (Machine to Trainee ratio 1: 4)
	Bamboo Work Artisan <i>Electives:2 - Bamboo Mat Weaver</i>	HCS/Q8702	1. Stick / Slitting / Splitting Machine 2. Hand saw	1. Stick / Slitting / Splitting Machine (Machine to Trainee ratio 1:10) 2. Hand saw (Machine to Trainee ratio 1:4)
	Bamboo Work Artisan <i>Electives:3 - Bamboo Utility Handicraft Assembler</i>	HCS/Q8702	1. Hand saw / zig saw 2. Circular saw 3. Bamboo shaver saw 4. Bamboo splitter	1. Hand saw / zig saw (Machine to Trainee ratio 1: 4) 2. Circular saw (Machine to Trainee ratio 1: 10) 3. Bamboo shaver saw (Machine to Trainee ratio 1: 4) 4. Bamboo splitter (Machine to Trainee ratio 1: 4)
71.	Carpet Weaver <i>Elective:1- Carpet Weaver Knotted</i>	HCS/Q5701	Carpet Knotted Machine	Machine to Trainee ratio 1:5
	Carpet Weaver <i>Elective:2- Carpet Weaver Tufted</i>	HCS/Q5701	Carpet Tufting Machine	Machine to Trainee ratio 1:5



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	Carpet Weaver <i>Elective:3- Handloom Weaver (Carpets)</i>	HCS/Q5701	Carpet Handloom Machine	Machine to Trainee ratio 1:5
72.	Latexing Man (Carpets)	HCS/Q5402	1. Wooden frame 2. Design Plate 3. Brushes 4. Comb	1. Wooden frame - Machine to Trainee ratio 1:2 2. Design Plate - Machine to Trainee ratio 1:2 3. Brushes - Machine to Trainee ratio 1:1 4. Comb - Machine to Trainee ratio 1:1
73.	Washer (Carpets)	HCS/Q5301	1. Vacuum Cleaner 2. Truck mount Carpet Cleaner 3. Hot Water Extraction	1. Vacuum Cleaner -Machine to Trainee ratio 1:10 2. Truck mount Carpet Cleaner - Machine to Trainee ratio 1:30 3. Hot Water Extraction - Machine to Trainee ratio 1:2
74.	Finisher (Carpets)	HCS/Q5407	1. Tagging machine with Tools 2. Stain Removing Machines with Tools	1. Tagging machine with Tools - Machine to Trainee ratio 1:30 2. Stain Removing



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				Machines with Tools- Machine to Trainee ratio 1:30
75.	Shade Supervisor (Carpets)	HCS/Q5203	1. Color Matching Instrument with Tools 2. Computer	1. Color Matching Instrument with Tools- Machine to Trainee ratio 1:15 2. Computer - Machine to Trainee ratio 1:15
76.	CAD Designer for Carpets	HCS/Q5202	1. Computer with CAD software 2. Computer/Laptop	1. Computer with CAD software - Machine to Trainee ratio 1:15 2. Computer/Laptop - Machine to Trainee ratio 1:5
77.	Loom Supervisor - Knotted Carpet	HCS/Q5410	1. Copper 2. Spindle	1. Copper - Machine to Trainee ratio 1:10 2. Spindle - Machine to Trainee ratio 1:10
78.	Quality Supervisor (Carpets)	HCS/Q5501	1. Moisture Meter 2. Weighing Balance	1. Moisture Meter - Machine to Trainee ratio 1:6 2. Weighing Balance - Machine to Trainee ratio 1:30



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79.	Ceramics Preparation Artisan <i>Electives:1- Casting Operator-Ceramics</i>	HCS/Q0801	1. Moulds 2. Wheels & Containers 3. Slip Trailers 4. Clay Cutter 5. Spray Gun	1. Moulds - Machine to Trainee ratio 1:10 2. Wheels & Containers - Machine to Trainee ratio 1:10 3. Slip Trailers -Machine to Trainee ratio 1:10 4. Clay Cutter - Machine to Trainee ratio 1:10 5. Spray Gun - Machine to Trainee ratio 1:10
	Ceramics Preparation Artisan <i>Electives:2- Colour Mixing Operator</i>	HCS/Q0801	1. Viscosity Meter 2. Weighing Balance 3. Measuring Scale 4. Fire Clay 5. Color Mixer	1. Viscosity Meter - Machine to Trainee ratio 1:30 2. Weighing Balance - Machine to Trainee ratio 1:30 3. Measuring Scale - Machine to Trainee ratio 1:30 4. Fire Clay -Machine to Trainee ratio 1:15 5. Color Mixer -Machine to Trainee ratio 1:30
	Ceramics Preparation Artisan	HCS/Q0801	1. Weighing Balance 2. Mixer	1. Weighing Balance - Machine to Trainee ratio



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	<i>Electives:3 - Engobing operator (Ceramics)</i>		3. Brush Set	1:30 2. Mixer - Machine to Trainee ratio 1:30 3. Brush Set - Machine to Trainee ratio 1:5
	Ceramics Preparation Artisan <i>Electives:4 - Furnace Operator</i>	HCS/Q0801	1. Furnace 2. Furnace Vacuum Pump 3. Weight Scale 4. Temp. Recorder 5. Pyrometer	1. Furnace - Machine to Trainee ratio 1:30 2. Furnace Vacuum Pump - Machine to Trainee ratio 1:30 3. Weight Scale -Machine to Trainee ratio 1:30 4. Temp. Recorder - Machine to Trainee ratio 1:10 5. Pyrometer -Machine to Trainee ratio 1:15
	Ceramics Preparation Artisan <i>Electives:5 - Glazing operator (Ceramics)</i>	HCS/Q0801	1. Weighing Balance 2. Jiffy Mixer 3. Spatulas 4. Spray Gun 5. Metal Container 6. Brush Set	1. Weighing Balance - Machine to Trainee ratio 1:30 2. Jiffy Mixer -Machine to Trainee ratio 1:2 3. Spatulas - Machine to Trainee ratio 1:2 4. Spray Gun -Machine to Trainee ratio 1:5
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				5. Metal Container - Machine to Trainee ratio 1:2 6. Brush Set -Machine to Trainee ratio 1:5
	Ceramics Preparation Artisan <i>Electives:6 - Jigger operator (Ceramics)</i>	HCS/Q0801	1. Weighing Balance 2. Revolving wheels 3. Cutting wheels 4. Veriner Caliper 5. Molds (Ma	1. Weighing Balance - Machine to Trainee ratio 1:30 2. Revolving wheels - Machine to Trainee ratio 1:2 3. Cutting wheels - Machine to Trainee ratio 1:2 4. Veriner Caliper - Machine to Trainee ratio 1:5 5. Molds -Machine to Trainee ratio 1:2
	Ceramics Preparation Artisan <i>Electives:7 - Moudler (Ceramics)</i>	HCS/Q0801	1. Grinding Wheels 2. Grinders 3. Dividers	1. Grinding Wheels - Machine to Trainee ratio 1:2 2. Grinders -Machine to



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			4. Scribes	Trainee ratio 1:2 3. Dividers -Machine to Trainee ratio 1:2 4. Scribes -Machine to Trainee ratio 1:2
	Ceramics Preparation Artisan <i>Electives:8 - Mixing operator</i>	HCS/Q0801	1. Weighing Balance 2. Big container for mixing	1. Weighing Balance - Machine to Trainee ratio 1:30 2. Big container for mixing - Machine to Trainee ratio 1:30
80.	Lab Assistant (Ceramics)	HCS/Q1002	1. Weighing Balance 2. Grinders 3. Dividers 4. Scribes	1. Weighing Balance - Machine to Trainee ratio 1:30 2. Grinders -Machine to Trainee ratio 1:5 3. Dividers -Machine to Trainee ratio 1:5 4. Scribes -Machine to Trainee ratio 1:5
81.	Modeller (Ceramics)	HCS/Q0201	1. Potters Needles 2. Cut-off Wires	1. Potters Needles - Machine to Trainee ratio 1:2



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			3. Fettling Knives 4. Wooden Modeling Tools Set	2. Cut-off Wires -Machine to Trainee ratio 1:2 3. Fettling Knives - Machine to Trainee ratio 1:2 4. Wooden Modeling Tools Set -Machine to Trainee ratio 1:10
82.	Quality Check Technician (Ceramics)	HCS/Q1001	1. Fluid and Vacuum pumps 2. Hot Plates 3. Microwave 4. Heating Mantles 5. Mechanical shakers 6. Blenders 7. Mixers 8. Refrigerator 9. Oven	1. Fluid and Vacuum pumps - Machine to Trainee ratio 1:6 2. Hot Plates - Machine to Trainee ratio 1:2 3. Microwave -Machine to Trainee ratio 1:30 4. Heating Mantles - Machine to Trainee ratio 1:2 5. Mechanical shakers - Machine to Trainee ratio 1:2 6. Blenders -Machine to Trainee ratio 1:2



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				7. Mixers -Machine to Trainee ratio 1:2 8. Refrigerator -Machine to Trainee ratio 1:30 9. Oven -Machine to Trainee ratio 1:30
83.	Sketching and Painting Artisan (Ceramics)	HCS/Q0802	1. Easels 2. Mahl sticks 3. Canvas 4. Brushes 5. Palettes	1. Easels - Machine to Trainee ratio 1:2 2. Mahl sticks - Machine to Trainee ratio 1:2 3. Canvas - Machine to Trainee ratio 1:6 4. Brushes - Machine to Trainee ratio 1:2 5. Palettes -Machine to Trainee ratio 1:2
84.	Floor Supervisor (Ceramics)	HCS/Q0101	1. Caliper 2. Felting Knives 3. Needles	1. Caliper - Machine to Trainee ratio 1:2 2. Felting Knives -Machine to Trainee ratio 1:2 3. Needles - Machine to Trainee ratio 1:2



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85.	Merchandiser	HCS/Q9801	1. Microsoft Software 2. Marketing Softwares 3. Product Specification Chart 4. Computer/Laptop	1. Microsoft Software - Machine to Trainee ratio 1:30 2. Marketing Softwares - Machine to Trainee ratio 1:30 3. Product Specification Chart - Machine to Trainee ratio 1:5 4. Computer/Laptop - Machine to Trainee ratio 1:5
86.	Stringing/Beading Assembler (Fashion Jewellery)	HCS/Q1101	1. Cup Burr 2. Reamers 3. Tweezers 4. Cutter	1. Cup Burr - Machine to Trainee ratio 1:2 2. Reamers - Machine to Trainee ratio 1:2 3. Tweezers - Machine to Trainee ratio 1:2 4. Cutter - Machine to Trainee ratio 1:2
87.	Product Maker (Fashion Jewellery)	HCS/Q1102	1. Faceting and Polishing Machine 2. Tumbling Machine	1. Faceting and Polishing Machine - Machine to Trainee ratio 1:6



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			3. Transfer Jack 4. Hot Plate	2. Tumbling Machine - Machine to Trainee ratio 1:6 3. Transfer Jack - Machine to Trainee ratio 1:6 4. Hot Plate - Machine to Trainee ratio 1:2
88.	Quality Checker (Fashion Jewellery)	HCS/Q1201	1. Digital Vernier Caliper 2. Lenses of different types	1. Digital Vernier Caliper - Machine to Trainee ratio 1:1) 2. Lenses of different types -Machine to Trainee ratio 1:5
89.	Jute Product Stitching Operator	HCS/Q7403	1. Screen Wooden Nails 2. Frame 3. Squeezes 4. Tumbler/Gamla	1. Screen Wooden Nails - Machine to Trainee ratio 1:2 2. Frame - Machine to Trainee ratio 1:2 3. Squeezes - Machine to Trainee ratio 1:2



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				4. Tumbler/Gamla - Machine to Trainee ratio 1:2
90.	Applique Artisan	HCS/Q7303	1. Table lamps 2. Frame/Loops 3. Rotary Cutter 4. Tweezers/Forceps	1. Table lamps - Machine to Trainee ratio 1:10 2. Frame/Loops - Machine to Trainee ratio 1:5 3. Rotary Cutter- Machine to Trainee ratio 1:6 4. Tweezers/Forceps - Machine to Trainee ratio 1:5
91.	Hand Block Printer	HCS/Q7201	1. Printing Table 2. Tray Trolley 3. Blocks 4. Mogari (Wooden Roller) 5. Kotan (Wooden Mallet)	1. Printing Table - Machine to Trainee ratio 1:5 2. Tray Trolley -Machine to Trainee ratio 1:10 3. Blocks - Machine to Trainee ratio 1:5 4. Mogari (Wooden Roller) - Machine to Trainee



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				ratio 1:5 5. Kotan (Wooden Mallet) - Machine to Trainee ratio 1:5
92.	Jute Handloom Weaver	HCS/Q7402	1. Handloom - Jute	1. Handloom - Jute - Machine to Trainee ratio 1:30
93.	Jute Products Artisan	HCS/Q7405	1. Sewing Machine 2. Wrench 3. Hand Drill 4. Jack Plane	1. Sewing Machine - Machine to Trainee ratio 1:6 2. Wrench - Machine to Trainee ratio 1:2 3. Hand Drill - Machine to Trainee ratio 1:2 4. Jack Plane - Machine to Trainee ratio 1:2
94.	Jute Screen Printer	HCS/Q7404	1. Frame 2. Squeezers 3. Tumbler/Gamla	1. Frame - Machine to Trainee ratio 1:6 2. Squeezers - Machine to Trainee ratio 1:2



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			4. Screen Wooden Nails	3. Tumbler/Gamla - Machine to Trainee ratio 1:2 4. Screen Wooden Nails - Machine to Trainee ratio 1:2
95.	Jute Yarn Hank Dyer	HCS/Q7401	1. Gas Burner 2. Dyeing steel/metal container 3. Dyeing utensils set	1. Gas Burner - Machine to Trainee ratio 1:6 2. Dyeing steel/metal container - Machine to Trainee ratio 1:6 3. Dyeing utensils set - Machine to Trainee ratio 1:6
96.	Agarbatti Maker	HCS/Q7901	1. Agrbatting Making Machine 2. Weighing Machine 3. Mortar and Pestle 4. Extruder 5. Grinders	1. Agrbatting Making Machine - Machine to Trainee ratio 1:30 2. Weighing Machine - Machine to Trainee ratio 1:30 3. Mortar and Pestle - Machine to Trainee ratio



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				1:2 4. Extruder - Machine to Trainee ratio 1:30 5. Grinders - Machine to Trainee ratio 1:15
97.	Automatic Stick Making M/C Operator	HCS/Q7803	1. Hacksaw 2. Bamboo Splitting Machine 3. Cutting Blades 4. Stick Making Machine 5. Weighing Machine	1. Hacksaw - Machine to Trainee ratio 1:15 2. Bamboo Splitting Machine -Machine to Trainee ratio 1:30 3. Cutting Blades - Machine to Trainee ratio 1:15 4. Stick Making Machine -- Machine to Trainee ratio 1:30 5. Weighing Machine - Machine to Trainee ratio 1:15



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98.	Decorative Painter - Glassware	HCS/Q2502	1. Glass Marking Machine 2. Scraper 3. Painting brushes set 4. Firing Oven	1. Glass Marking Machine -Machine to Trainee ratio 1:30 2. Scraper - Machine to Trainee ratio 1:15 3. Painting brushes set - Machine to Trainee ratio 1:15 4. Firing Oven - Machine to Trainee ratio 1:30
99.	Stone Preparation Artisan <i>Electives:1 - Chiseler - Stonecraft</i>	HCS/Q1401	1. Hammer set 2. Chisels set 3. Sharpening Stone 4. Drill machine	1. Hammer set -Machine to Trainee ratio 1:5 2. Chisels set -Machine to Trainee ratio 1:5 3. Sharpening Stone - Machine to Trainee ratio 1:5 4. Drill machine -Machine to Trainee ratio 1:5
	Stone Preparation Artisan <i>Electives:2 - Drill machine</i>	HCS/Q1401	1. Drilling Machine 2. Drill Angle Gauge	1. Drilling Machine - Machine to Trainee ratio



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	<i>Operator - Stonecraft</i>		3. Direct Reading Vernier Caliper 4. Slot Drill 5. Jack Hammer 6. Hydraulic Jack	1:30 2. Drill Angle Gauge - Machine to Trainee ratio 1:30 3. Direct Reading Vernier Caliper -Machine to Trainee ratio 1:15 4. Slot Drill -Machine to Trainee ratio 1:15) 5. Jack Hammer -Machine to Trainee ratio 1:30 6. Hydraulic Jack - Machine to Trainee ratio 1:30
	Stone Preparation Artisan <i>Electives:3 - Stone Cutter (Cutting machine operator)</i>	HCS/Q1401	1. Chisel Flat Cold 2. Hammer Ball Pein 3. Stone Cutting Machine)	1. Chisel Flat Cold - Machine to Trainee ratio 1:10 2. Hammer Ball Pein - Machine to Trainee ratio 1:10 3. Stone Cutting Machine - Machine to Trainee ratio 1:15



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	Stone Preparation Artisan <i>Electives:4 - Stone Grinder (Grinding machine operator)</i>	HCS/Q1401	1. Stone Grinding machine 2. Grinding Wheels	1. Stone Grinding machine - Machine to Trainee ratio 1:30 2. Grinding Wheels - Machine to Trainee ratio 1:15
	Stone Preparation Artisan <i>Electives:5 - Turner - Stonecraft</i>	HCS/Q1401	1. Hammer 2. Calipers 3. Chisel 4. Bench vise 5. Micrometer 6. Angle Gauge 7. Die handle 8. Screw Driver	1. Hammer -Machine to Trainee ratio 1:5 2. Calipers -Machine to Trainee ratio 1:10 3. Chisel -Machine to Trainee ratio 1:5 4. Bench vise -Machine to Trainee ratio 1:5 5. Micrometer -Machine to Trainee ratio 1:15 6. Angle Gauge -Machine to Trainee ratio 1:15 7. Die handle -Machine to Trainee ratio 1:15 8. Screw Driver -Machine to Trainee ratio 1:5



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100.	Quality Checker - Stonecraft	HCS/Q1601	1. Weighing machine 2. Calipers	1. Weighing machine - Machine to Trainee ratio 1:30 2. Calipers -Machine to Trainee ratio 1:15
101.	Design Marker - Stonecraft	HCS/Q1501	1. Planishing Hammers 2. Gravers 3. Stretcher Shrinker	1. Planishing Hammers - Machine to Trainee ratio 1:5 2. Gravers -Machine to Trainee ratio 1:5 3. Stretcher Shrinker - Machine to Trainee ratio 1:5
102.	Seasoning and Chemical Treatment Assistant (Woodware)	HCS/Q6801	1. Moisture Meter 2. Wooden Articles 3. Hard Hats 4. Vessels	1. Moisture Meter - Machine to Trainee ratio 1:30 2. Wooden Articles - Machine to Trainee ratio 1:5 3. Hard Hats -Machine to Trainee ratio 1:5 4. Vessels -Machine to Trainee ratio 1:30
103.	Assembly Machine Operator (Woodware)	HCS/Q6902	1. Table Saw 2. Pliers 3. Chisels	1. Table Saw -Machine to Trainee ratio 1:5 2. Pliers -Machine to



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			4. Hand Saw	Trainee ratio 1:5 3. Chisels -Machine to Trainee ratio 1:5 4. Hand Saw -Machine to Trainee ratio 1:5
104.	Finisher (Woodware)	HCS/Q7101	1. Chisel set 2. Power Sander 3. Wood grinder 4. Spray gun for wooden	1. Chisel set -Machine to Trainee ratio 1:30 2. Power Sander - Machine to Trainee ratio 1:15 3. Wood grinder -Machine to Trainee ratio 1:15 4. Spray gun for wooden - Machine to Trainee ratio 1:30
105.	Lacquerer (Woodware)	HCS/Q7102	1. Spray Pressure Gun 2. Compressor 3. Brushes set	1. Spray Pressure Gun - Machine to Trainee ratio 1:15 2. Compressor -Machine to Trainee ratio 1:30 3. Brushes set -Machine to Trainee ratio 1:30
106.	Designer (Woodware Products)	HCS/Q6601	1. Drill Machine 2. Metal Tape Measure 3. Hack Saw 4. Centre Punch 5. Vernier Gauge	1. Drill Machine - Machine to Trainee ratio 1:10 2. Metal Tape Measure - Machine to Trainee ratio 1:10



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				3. Hack Saw -Machine to Trainee ratio 1:10 4. Centre Punch -Machine to Trainee ratio 1:10 5. Vernier Gauge -Machine to Trainee ratio 1:10
107.	Embossing Artisan (Metalware)	HCS/Q2901	1. Gas Burner 2. File and Buffer 3. Chisels 4. Hammer set	1. Gas Burner -Machine to Trainee ratio 1:10 2. File and Buffer - Machine to Trainee ratio 1:5 3. Chisels - Machine to Trainee ratio 1:5 4. Hammer set - Machine to Trainee ratio 1:5
108.	Etching Artisan (Metalware)	HCS/Q2909	1. Hand Graver 2. Surface Grinder 3. Chisel set 4. Hammer set 5. Magnifier	1. Hand Graver - Machine to Trainee ratio 1:5 2. Surface Grinder - Machine to Trainee ratio 1:10 3. Chisel set -Machine to Trainee ratio 1:5 4. Hammer set -Machine to Trainee ratio 1:5 5. Magnifier - Machine to



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				Trainee ratio 1:15
109.	Inlay Artisan (Metalware)	HCS/Q2903	1. Cutting Machine 2. Hammer set 3. Chisel set 4. Hand Drill 5. Buffing Machine	1. Cutting Machine - Machine to Trainee ratio 1:15 2. Hammer set -Machine to Trainee ratio 1:5 3. Chisel set -Machine to Trainee ratio 1:5 4. Hand Drill - Machine to Trainee ratio 1:15 5. Buffing Machine - Machine to Trainee ratio 1:15
110.	Painter (Metal Handicrafts)	HCS/Q3101	1. Spry pressure gun 2. Brush set for paint 3. Metal grinder/buffing machine	1. Spry pressure gun - Machine to Trainee ratio 1:15 2. Brush set for paint - Machine to Trainee ratio 1:5 3. Metal grinder/buffing machine - Machine to Trainee ratio 1:15
111.	Polisher (Metalware)	HCS/Q3002	1. Metal buffing machine	1. Metal buffing machine - Machine to Trainee ratio 1:2



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112.	Lacquerer (Paper Mache)	HCS/Q4505	1. Compressure 2. Spray Gun Pressure 3. Brushes set	1. Compressure -Machine to Trainee ratio 1:30 2. Spray Gun Pressure - Machine to Trainee ratio 1:10 3. Brushes set -Machine to Trainee ratio 1:5
113.	Paper Mache Art Designer	HCS/Q4506	1. Mixing bowl 2. Hand Mixer 3. Glue Gun	1. Mixing bowl -Machine to Trainee ratio 1:5 2. Hand Mixer -Machine to Trainee ratio 1:5 3. Glue Gun -Machine to Trainee ratio 1:10
114.	Paper Mache Craft Specialist	HCS/Q4501	1. Hand Mixer 2. Mixing bowl 3. Glue Gun	1. Hand Mixer - Machine to Trainee ratio 1:5 2. Mixing bowl - Machine to Trainee ratio 1:5 3. Glue Gun -Machine to Trainee ratio 1:5
115.	Clipper and Embosser (Carpets)	HCS/Q5404	1. Scissor 2. Clipper (to cut the pile)	1. Scissor - Machine to Trainee ratio 1:5 2. Clipper (to cut the pile) - Machine to Trainee ratio 1:5



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116.	Designer and Shade Writer (Carpets)	HCS/Q5204	Computer with CAD software	Machine to Trainee ratio 1:15
117.	Dyer (Rangsaaz) (Carpets)	HCS/Q5101	1. Weighing Machine 2. Dyeing Container (Metallic/steel) 3. Burner	1. Weighing Machine (Machine to Trainee ratio 1:15) 2. Dyeing Container (Metallic/steel) (Machine to Trainee ratio 1:15) 3. Burner (Machine to Trainee ratio 1:15)
118.	Tufted Weaving Supervisor (Carpets)	HCS/Q5411	1. Computer/Laptop 2. Color Matching Instruments (Color Matching Cabinet / Portable Spectrophotometer)	1. Computer/Laptop (Machine to Trainee ratio 1:10) 2. Color Matching Instruments (Color Matching Cabinet / Portable Spectrophotometer) (Machine to Trainee ratio 1:30)
119.	Tufting Gun Master (Carpets)	HCS/Q5409	1. Tufting Gun 2. Tool box 3. Soldering device	1. Tufting Gun (Machine to Trainee ratio 1:10) 2. Tool box (Machine to Trainee ratio 1:10) 3. Soldering device (Machine to Trainee ratio 1:10)
120.	Material Preparation Worker (Ceramics)	HCS/Q0702	1. Sieve set for different ground materials 2. Jiffy Mixer 3. Spray gun atomizers	1. Sieve set for different ground materials (Machine to Trainee ratio 1:10) 2. Jiffy Mixer (Machine to Trainee ratio 1:15) 3. Spray gun atomizers (Machine to Trainee ratio 1:30)



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121.	Cutting and Threading Operator (Metalware)	HCS/Q2906	1. Metal Cutters 2. Hand Press tool 2. Threading Machine 3. Drill Machine	1. Metal Cutters (Machine to Trainee ratio 1:15) 2. Hand Press tool (Machine to Trainee ratio 1:30) 2. Threading Machine (Machine to Trainee ratio 1:30) 3. Drill Machine (Machine to Trainee ratio 1:30)
122.	Abrasion & Grinding Machine Operator	HCS/Q2303	1. Abrasive Machine for glassware 2. Electric Hand Grinders for glassware	1. Abrasive Machine for glassware (Machine to Trainee ratio 1:15) 2. Electric Hand Grinders for glassware (Machine to Trainee ratio 1:15)
123.	Decorative Cutter (Glassware)	HCS/Q2501	1. Cutting wheel for glassware 2. Etching wheel for glassware	1. Cutting wheel for glassware (Machine to Trainee ratio 1:15) 2. Etching wheel for glassware (Machine to Trainee ratio 1:15)
124.	Silver Coating Technician (Glassware)	HCS/Q2401	1. Mixer for mixing of chemicals/emulsion used for coating of glassware 2. Spray gun for glassware 3. Brush set for glassware	1. Mixer for mixing of chemicals/emulsion used for coating of glassware (Machine to Trainee ratio 1:30) 2. Spray gun for glassware (Machine to Trainee ratio 1:10) 3. Brush set for glassware (Machine to Trainee ratio 1:10)
125.	Carpet Final Inspector (Carpets)	HCS/Q5601	1. Inspection Table (Minimum size 60X40 inch) 2. Computer/laptop 3. Printer	1. Inspection Table (Minimum size 60X40 inch): Machine to Trainee ratio - 1:30



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			4. Measuring Tape 5. Tagging machine (Optional) 6. Stain Removing Machines (Optional)	2. Computer/laptop: Machine to Trainee ratio - 1:30 3. Printer: Machine to Trainee ratio - 1:30 4. Measuring Tape: Machine to Trainee ratio - 1:1 5. Tagging machine (Optional) : Machine to Trainee ratio - 1:30 6. Stain Removing Machines (Optional): Machine to Trainee ratio - 1:30
126.	Block Print Supervisor (Hand Crafted Textiles)	HCS/Q7202	1. Printing table 2. Printing blocks 3. Dyeing Container (Metallic/steel) 4. Burners 5. Dyeing Utensils Set	1. Printing table: Machine to Trainee ratio 1:15 2. Printing blocks: Machine to Trainee ratio 1:10 3. Dyeing Container (Metallic/steel): Machine to Trainee ratio 1:10 4. Burners: Machine to Trainee ratio 1:10 5. Dyeing Utensils Set: Machine to Trainee ratio 1:10



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127.	Master Hand Embroiderer (Hand Crafted Textiles)	HCS/Q7302	1. Embroidery Frame/Hoops (round and square)	1. Embroidery Frame/Hoops (round and square) - Machine to Trainee ratio: 1:1
128.	Wooden Toy Maker - Artisan	HCS/Q6703	1. Wood Turner Machine 2. Thin Blade Saw 3. Chisel (Flat / curved pointed): 4. Sander 5. Spray gun machine 6. Mini Band saw 7. Drilling Machine 8. Hammer	1. Wood Turner Machine: Machine to Trainee ratio 1:30 2. Thin Blade Saw: Machine to Trainee ratio 1:10 3. Chisel (Flat / curved pointed): Machine to Trainee ratio 1:2 4. Sander: Machine to Trainee ratio 1:10 5. Spray gun machine: Machine to Trainee ratio 1:30 6. Mini Band saw: Machine to Trainee ratio 1:30 7. Drilling Machine: Machine to Trainee ratio 1:10 8. Hammer: Machine to Trainee ratio 1:2
129.	Ceramics and Terracotta Toy Maker - Artisan	HCS/Q0402	1. Blender 2. Sculpture (for molding of master dice) 3. Chisel 4. Sharp pen	1. Blender: Machine to trainee ratio 1:30 2. Sculpture (for molding of master dice): Machine to Trainee



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			5. Turning wheel	ratio 1:2 3. Chisel: Machine to Trainee ratio 1:2 4. Sharp pen: Machine to Trainee ratio 1:2 5. Turning wheel: Machine to trainee ratio 1:5
130.	Glass Toy Maker - Artisan	HCS/Q2206	1. Hollow pipe(s) 2. Gas Burners 3. Gas touch 4. Furnace 5. Hand cutters for trimming and shaping	1. Hollow pipe(s): Machine to Trainee ratio 1:2 2. Gas Burners: Machine to Trainee ratio 1:15 3. Gas touch: Machine to Trainee ratio 1:5 4. Furnace: Machine to Trainee ratio 1:30 5. Hand cutters for trimming and shaping: Machine to Trainee ratio 1:5
131.	Leather Toy Maker - Artisan	HCS/Q0804	1. Galvanized iron wires roll of 1 mm to 4 mm thickness for making skeleton	Machine to Trainee ratio 1:1
132.	Puppet Maker - Artisan	HCS/Q9001	1. Sewing Machine 2. Hand saw 3. Mini Band saw	1. Sewing Machine: Machine to Trainee ratio 1:10 2. Hand saw: Machine to



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			4. Drilling Machine 5. Chisel 6. Carving set	Trainee ratio 1:5 3. Mini Band saw: Machine to Trainee ratio 1:5 4. Drilling Machine: Machine to Trainee ratio 1:10 5. Chisel: Machine to Trainee ratio 1:5 6. Carving set: Machine to Trainee ratio 1:5
133.	Traditional Painting Maker - Artisan	HCS/Q0805	1. Painting brush set 2. Primary Colors set 3. Palette for painting	Machine to Trainee ratio 1:1
134.	Namda Craft Maker	HCS/Q5206	1. Dyeing Vessel 2. Tufting needle	1. Dyeing Vessel: Machine to Trainee ratio 1:30 2. Tufting needle: Machine to Trainee ratio 1:1
135.	Natural Fibre Maker	HCS/Q4405	1. Takua (6 inch long needle-shaped iron object with a rounded head made of lac which is used to grip the needle while coiling the grass) 2. Knife / Blade 3. Dyeing vessel 4. Gas Burner	1. Takua (6 inch long needle-shaped iron object with a rounded head made of lac which is used to grip the needle while coiling the grass): Machine to Trainee ratio 1:1 2. Knife / Blade: Machine to Trainee ratio 1:1

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				3. Dyeing vessel: Machine to Trainee ratio 1:30 4. Gas Burner: Machine to Trainee ratio 1:30
136.	Upcycling Scraps and E-waste Artisan	HCS/Q9003	1. Welding Machine 2. Power Saw (Rotary/Circular/Chop) 3. Metal Sheet Cutter 4. Drill Machine 5. Carving tools	1. Welding Machine: Machine to Trainee ratio 1:30 2. Power Saw (Rotary/Circular/Chop): Machine to Trainee ratio 1:30 3. Metal Sheet Cutter: Machine to Trainee ratio 1:10 4. Drill Machine: Machine to Trainee ratio 1:10 5. Carving tools: Machine to Trainee ratio 1:5
137.	Jute Selector cum Assorter	TSC/Q0107	1. Jute Spreader Machine (Desirable) with other equipments 2. Jute Softener Machine (Desirable) with other equipments	Machine to Trainee ratio 1:30



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138.	Jute Carding Operator	TSC/Q0108	1. Jute Breaker carding Machine with other equipments 2. Jute Finisher Carding Machine with other equipments	Machine to Trainee ratio 1:30
139.	Jute Spinning Sardar (Jobber) cum Jr. Supervisor	TSC/Q0204	Jute Spinning Frame Machines	Machine to Trainee ratio 1:30
140.	Jute Weft Winding Operator	TSC/Q0304	Any of Jute weft winding machine and/or any of Cop winding Machine in working condition	Machine to Trainee ratio 1:30
141.	Jute Beaming Operator	TSC/Q2104	Beaming and Sizing Machine	Machine to Trainee ratio 1:30
142.	Automatic Shuttle Loom Operator	TSC/Q2201	Any shuttle loom fitted with weavers beam in working condition.	Machine to Trainee ratio 1:10
143.	Shuttle-Less Loom Weaver – Projectile	TSC/Q2202	Projectile Shuttleless loom fitted with weavers beam in working condition.	Machine to Trainee ratio 1:10
144.	Vanya Silk Reeling & Spinning Manufacturer	TC SILK 01	1. Reeling cum twisting machine. 2. Buniyaad reeling machine. 3. Wet reeling machine 4. Motorised cum pedal operated spinning machine(Ring /flyer type)	Machine to Trainee ratio 1:10



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			5. Cocoon cooking technology/equipments (Open Pan/Two Pan/Pressurized) 6. Volume based cocoon sorting machine 7. Re-reeling machine 8. Skeinling & book making Machine. 9. Epprouvette	
145.	Mulberry Silk Reeling Manufacturer	TC SILK 02	1. Cocoon Sorting Machine and assessment gadgets. 2. Hot Air Drying/Steam Stifling Machine 3. Storage Racks 4. Cocoon cooking equipments – Open Pan/Three Pan/Pressurised batch cooking/Conveyor cooking machine 5. Reeling Machines – Charkha, Cottage basin, Multi end, Semi-Automatic 6. Reel permeation chamber 7. Close type re-reeling machine. 8. Skeinling & book making M/c	Machine to Trainee ratio 1:10



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			9. Epprouvette	
146.	Silk Weaving Manufacturer	TC SILK 03	1. Soaking unit with all its accessories 2. Winding, Doubling and Twisting unit with all its accessories 3. Warping Machine with all its accessories 4. Pirn winding unit with all its accessories 5. Handloom / Powerloom / Shuttle-less looms with all its accessories	Machine to Trainee ratio 1:30
147.	Silk Wet Processing Manufacturer	TC SILK 04	1. Water bath 2. Beaker/Vat/Tub Dyeing Machine 3. Lab. Winch / Padding Mangle with all accessories. 4. Water Softening plant 5. Printing Table with Blocks and Screens. 6. Steam Ager 7. Hydro extractor 8. Colour Matching Cabinet 9. Epprouvette 10. Boiler for steam / hot waters	Machine to Trainee ratio 1:10



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148.	Silk Twister	TC SILK 05	1. Soaking Unit. 2. Winding & Doubling machine 3. Twisting Machine 4. Autoclave 5. Weighing balance 6. Hank making/ball warping machines 7. Re-reeling machine	Machine to Trainee ratio 1:30
149.	Silk Handloom Weaver	TC SILK 06	1. Handloom with all its accessories 2. Pirn winding unit with all its accessories (Optional) 3. Dobby / Jacquard with its accessories (Optional)	Machine to Trainee ratio 1:10
150.	Silk Powerloom Weaver	TC SILK 07	1. Powerloom with all its accessories 2. Pirn winding unit with all its accessories 3. Dobby / Jacquard with its accessories	Machine to Trainee ratio 1:15



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151.	Computer Aided Textile Designer (Silk)	TC SILK 08	1. Computer/Laptop set with CAD software 2. Digitizing board 3. Printer 4. Scanner 5. Jacquard Card punching	1. Computer/Laptop set with CAD software: Machine to Trainee ratio 1:5 2. Digitizing board : Machine to Trainee ratio 1:30 3. Printer : Machine to Trainee ratio 1:30 4. Scanner: Machine to Trainee ratio 1:30 5. Jacquard Card punching: Machine to Trainee ratio 1:30
152.	Mulberry Silk Reeler	TC SILK 09	1. Cocoon Dryer 2. Storage Racks 3. Cocoon Cooking Table - Open Pan/Two pan/Three Pan/Pressurised batch 4. Reeling Machines - Cottage basin, Multi end, Semi-Automatic 5. Reel Permeation Chamber (Optional) 6. Close type Re-reeling Machine 7. Skeinning & Book Making m/c 8. Epprouvette	1. Cocoon Dryer: Machine to Trainee ratio 1:30 2. Storage Racks: Machine to Trainee ratio 1:15 3. Cocoon Cooking Table - Open Pan/Two pan/Three Pan/Pressurised batch: Machine to Trainee ratio 1:15 4. Reeling Machines - Cottage basin, Multi end, Semi-Automatic: Machine to Trainee ratio 1:30 5. Reel Permeation Chamber (Optional): Machine to Trainee ratio 1:30 6. Close type Re-reeling



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				Machine: Machine to Trainee ratio 1:30 7. Skeinling & Book Making m/c: Machine to Trainee ratio 1:30 8. Epprouvette: Machine to Trainee ratio 1:30
153.	Wool Cleaning and Scouring Supervisor	TC WOOL 01	1. Wool opening & cleaning Machine 2. Wool scoring Machine 3. ETP Treatment Plant (Desirable)	Machine to Trainee ratio 1:30
154.	Wool Fiber Scouring Machine Operator	TC WOOL 02	1. Wool opening & cleaning Machine 2. Wool scoring Machine 3. ETP Treatment Plant (Desirable)	Machine to Trainee ratio 1:30
155.	Wool Dyeing Supervisor	TC WOOL 03	1. Dyeing Machine (HTHP / Loose Stock Dyeing / Top Dyeing / Winch Dyeing / Jigger Dyeing / Soft Flow Dyeing / Yarn Dyeing / Hank Dyeing) 2. Effluent Treatment Plant (Desirable)	Machine to Trainee ratio 1:30



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156.	Wool Fiber Dyeing Machine Operator	TC WOOL 04	1. Dyeing Machine (HTHP / Loose Stock Dyeing / Top Dyeing / Hank Dyeing / Yarn Dyeing / Fiber Dyeing) 2. Effluent Treatment Plant (Desirable)	Machine to Trainee ratio 1:30
157.	Surgical Mask Machine Operator	TC TT 01	Programmable Logic Controller (PLC) based Surgical Mask Making Machine with complete line of operation to make the end product in working condition (Fully Automatic).	Machine to Trainee ratio 1:30
158.	Sanitary Napkin Machine Operator	TC TT 02	Sanitary napkin making machine with complete line of operation in working condition- Pulp pulverizer unit (Wood pulp pulverizer), super absorbent polymer feeding unit, Engraving cum top sheet feeding unit, Bottom film feeding unit, Back Release paper unit & Cutting unit, Wings release paper unit, packing cum sealing unit	Machine to Trainee ratio 1:30
159.	Needle Punch Nonwoven Machine Operator	TC TT 03	Needle Punch Nonwoven Machine with complete line of operation in working condition- opening and mixing unit, carding unit, lapping unit, needle punching unit and	Machine to Trainee ratio 1:30



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Infrastructure Requirements - Machine to Trainee ratio

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			calender unit.	
160.	Thermal Bonded Nonwoven Machine Operator	TC TT 04	Thermal Bonded Nonwoven Machine with complete line of operation in working condition-opening and mixing unit, carding unit, lapping unit, thermal bonding unit (Hot calendaring/through-Air thermal bonding/ultrasonic bonding/Radiant-heat bonding unit).	Machine to Trainee ratio 1:30
161.	Chemical Bonded Nonwoven Machine Operator	TC TT 05	- Chemical Bonded Nonwoven Machine with complete line of operation in working condition- opening and mixing unit, carding unit, lapping unit, chemical bonding unit (saturation bonding process/spray Technique/Foam Technique/Print Technique of Chemical Bonding/Powder bonding) - Drying of Chemical Bonded Nonwovens Machines (drum drying/belt drying/stenter drying/Infrared drying)	Machine to Trainee ratio 1:30



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Infrastructure Requirements - Machine to Trainee ratio

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162.	Textile Coating Machine Operator	TC TT 06	- Textile coating machine in working condition (Dip coating, Calendering, Direct Roll Coating, Knife Coating, Reverse Roll Coating, Rotary Screen Coating, Transfer Coating, Extrusion Coating, Gravure or Engraved roll coating, Spray Coating, Air-knife coating, Metering rod coating, Foamed and Crushed Foam Coating, Dry Powder Coating, Curtain Coating, Kiss Roll Coating). - Drying of coated fabric machines - Curing unit	Machine to Trainee ratio 1:30
163.	Narrow Loom Operator	TC TT 07	Narrow Loom	Machine to Trainee ratio 1:30
164.	Junior Supervisor – Narrow	TC TT 08	Narrow Loom	Machine to Trainee ratio 1:30



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Infrastructure Requirements - Machine to Trainee ratio

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	Loom			
165.	Junior Supervisor – Shade Net Fabric Machine	TC TT 09	Shade Net Fabric Machine	Machine to Trainee ratio 1:30
166.	Shade Net Fabric Machine Operator	TC TT 10	Shade Net Fabric Machine	Machine to Trainee ratio 1:30
167.	N95 Face Mask Machine Operator	TC TT 11	- Programmable Logic Controller (PLC) based N95 Mask Manufacturing Machine with complete line of operation to make the end product ready to use (Fully Automatic) - Ultrasonic machine for fusing mask & ear loop lace band	Machine to Trainee ratio 1:30
168.	Lab Technician - N95 Face Mask	TC TT 12	- Bacterial Filtration Efficiency (BFE) Analyser - Particle Filtration Efficiency (PFE) Analyser - Splash Resistance Tester - Differential Pressure Gauge - Limited Flame Spread Meter	Machine to Trainee ratio 1:30
169.	PPE Coverall (Disposable Gown) Stitching and Sealing Machine Operator	TC TT 13	- Sewing Machines (SNLS/Industrial) for PPE coverall Production - Hot Air Seam Sealing Machine	- Sewing Machines (SNLS/Industrial) for PPE coverall Production: Machine to Trainee ratio 1:2 - Hot Air Seam Sealing Machine: Machine to



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Infrastructure Requirements - Machine to Trainee ratio

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				Trainee ratio 1:5
170.	Lab Technician- PPE Coverall (Disposable Gown)	TC TT 14	1. Resistance to Microbial Penetration - Dry 2. Resistance to Microbial Penetration - Wet 3. Tensile Strength Tester for seams strength 4. Bursting Strength Tester 5. Synthetic Blood Penetration Tester 6. Hydrostatic Pressure Head Tester 7. Thickness Tester	Machine to Trainee ratio 1:30
171.	Hand Held Kapas Plucker Machine Operator	TC FIBER 01	• Hand Held Kapas Plucker Machine with its accessories	Machine to Trainee ratio 1:5