

Name of Trade		Turner	
Sr. No.	Name of the Equipment	Std List No.	Specification
1	2	3	4
1	Caliper out side spring joint 150 mm	1	150 mm Centrally mounted adjustment screw offers finer setting, than firm joint type
2	Caliper inside spring joint 150 mm	2	150mm Centrally mounted adjustment screw offers finer setting, than firm joint type
3	Caliper odd-leg firm joint 150 mm	3	Divider 150 cm spring Manufactured from good Quality High Carbon steel tips hardend and tempered
4	Steel Rule 150 mm 1 No	4	150mm Standard Stainless Steel Metric/Inch Stainless Steel Etched Ruler with zero at the edge
5	Scriber 150mm x 3 mm	5	7 Scriber 150mm length Scriber 150 mm X 3mm (Knurled centre position)spring made of high Carbon steel and point Hardened & temp
6	Hammer ball pein 250 gm with handle	6	250 gms ball pein with handle
7	Centre punch 100 mm.	7	100mm Set is made from hardened and tempered steel. Square heads, knurled grip
8	Prick punch 100 mm	8	Prick Punch Set is made from hardened and tempered steel. Square heads, knurled grip
9	Divider spring joint 150 mm	9	Divider spring joint 150 mm make high carbon steel
10	Safety goggles clear glass (Good quality)	10	Impact resistant molded lens with Super Coat anti-fog coating, 1 .8 mm thick polycarbonate lens

B: TOOLS, EQUIPMENTS AND GENERAL OUTFIT

Sr. No.	Required As Per NCVT norms	Sr. No.	
11	Surface plate 60 x 60 cm	11	60*60 cm make C.I / Granite
12	Work bench 240 x 120x 90cm high	12	240 x120 x 90 cm with 3.5 to 5 cm wooden surface at the top, legs 6 (Mild steel)
13	Marking table (CI) 120 x 120	13	120 x 120 cm Stand mild
14	Bench vice 125 mm jaw --- 6 nos.	14	Bench vice 125mm jaw manufactured from high Quality Grey Cast Iron .
15	Vee-Block 75 and 125 mm with clamp	15	cast iron/ carbon steel with magnatic effect hardened to 55-60 HRC

16	Universal Surface gauge 250 mm arm	16	The base 250mm arm is made from case hardened steel, ground on bottom and at one end. The Fine adjustment feature makes it possible to obtain quick and accurate settings. This adjustment is made by a knurled thumbscrew, which is located at the end of the rocker
17	Hammer ball pein 750 gm with handle	17	weight 750gm with handle
18	Chisel cold flat 20 x 150 mm	18	Chisel size: blade 20mm x length 150mm, Superior quality, long service life
19	Hammer copper/brass 500 gm with handle	19	Hammer ball pain copper/brass 500 gm Variants include the straight-peen, diagonal-peen, and cross-peen hammer
20	Hacksaw fixed 200 mm (Pistol grip)	20	hacksaw is a fine-tooth hand saw with a blade held under tension in a frame, used for cutting materials such as metal or plastics
21	File flat 300 mm rough	21	A Standard File Flat 300 mm long,,rough type made of HCS with handle
22	File flat 250 mm 2nd cut	22	A Standard File Flat 250mm second cut Type made of HCS with handle
23	File flat 250 mm smooth	23	A Standard File Flat 250 mm smooth Type made of HCS with handle
24	File half round 250 mm 2nd cut	24	A Standard File half round 250 mm 2nd cut Type made of HCS with handle
25	File round 250 mm smooth	25	A Standard File round smooth 250 mm Type made of HCS with handle
26	File half round 150 mm smooth	26	A Standard File half round smooth 250 mm Type made of HCS with handle
27	Knurling tool revolving head (Rough, med, fine) diamond and straight	27	128 Diametral pitch with 36 teeth.
28	Combination set 300 mm (Complete Set)	28	Combination Set Square With Level Scribe & 12" 300 Mm Steel Metal Ruler Rule Set
29	Screw Driver 200 & 300 blade heavy duty	29	200 & 300 BLADE WITH PLASTIC HANDLE_HEAVY-DUTY
30	Spanner double ended 6 mm to 21 mm	30	6MM TO 21MM Made of high quality chrome vanadium steel or carbon steel, spanners are available in different finishes.
31	Spanner adjustable 200 mm	31	200MM Forged Chrome Vanadium steel construction for strength and durability. Wide handle for comfort under high torque
32	Pliers flat nose 150 mm side cutting	32	150MM equipment's. Plain table with stands and accessories.
33	Caliper transfer inside 150 mm	33	150MM is made of flat stock, high-grade steel, for easily reproducible and accurate transfer
34	Micrometer Outside 0 to 1" Reading 0.0001"	34	Range 0-1 inch ,and least count:0.0001" Insulated Steel Frame. Friction Thimble.
35	Micrometer Outside 0 to 25 mm Reading 0.01 mm	35	Range 0-25 mm and least count 0.01mm Carbide Tipped Measuring Faces. These Sets 0 to 25mm Insulated Steel Frame. Friction Thimble
36	Micrometer Outside 25 to 50 mm Reading 0.01 mm	36	range 25-50mm least count 0.01 mm ,Carbide Tipped Measuring Faces.
37	Micrometer Outside 50to 75 mm Reading 0.01 mm	37	range 50-75mm least count 0.01 mm ,Carbide Tipped Measuring Faces.
38	Micrometer Inside up to 25 mm Reading 0.01 mm	38	range upto25mm with least count 0.01 mm ,Carbide Tipped Measuring Faces.

39	Micrometer Inside up to 50 to 150 mm reading 0.01 mm	39	range 50-150mm with least count 0.01 mm ,Carbide Tipped Measuring Faces.
40	Depth Gauge Micrometer 0 to 150 mm Reading 0.01 mm	40	range 50-150mm with least count 0.01 mm ,Carbide Tipped Measuring Faces.
41	Vernier Caliper Outside, Inside and Depth 200 mm /8 inches with metric & inch scale	41	System of Measurement Inch/Metric Material Type Stainless Steel Manufacturer Series Number 530 Series Specific Uses For Product Depth , Inside , Outside , Step Tip Description Standard
42	Dial Vernier Caliper with metric 200 mm reading 0.05 mm	42	Stainless Steel, Readout: 0.01mm; 0.02mm.Measuring range: 0-200, Satin chrome plated,
43	Vernier Bevel Protractor 300 mm blade	43	With Magnifying glass and acute angle attachment Two Blades 150mm and 300mm Least Count 5 ', Digimatic Electronic Type also available
44	Vernier Micrometer 0 - 25 mm o/s LC 0.001mm	44	Matt chrome thimble and sleeve <ul style="list-style-type: none"> • Tungsten Carbide measuring faces • Enamelled steel frame • Minimum accuracy scale: 0.01mm • Measuring range: 0-25mm • Lock • Ratchet
45	Vernier Micrometer 25 - 50 mm outside reading 0.001mm	45	Matt chrome thimble and sleeve <ul style="list-style-type: none"> • Tungsten Carbide measuring faces • Enamelled steel frame • Minimum accuracy scale: 0.01mm • Measuring range: 25-50mm • Lock • Ratchet
46	Vernier Micrometer 0 inch to 1 inch. Outside Reading 0.0001 inch	46	Matt chrome thimble and sleeve <ul style="list-style-type: none"> • Tungsten Carbide measuring faces • Enamelled steel frame • Minimum accuracy scale: 0.01 inch • Measuring range: 0- 1 inch • Lock • Ratchet
47	Feeler Gauge 100 mm blade metric set	47	No. of blades - 13. Range - 0.03-0.50mm. Width - 12.7mm. Length - 100mm.

48	Radius Gauge 1 to 7 mm & 7.5 to 15 mm	48	Range (mm) 1-7 & 7.5-15 mm Gages 14 Increments 0.5mm Material Steel
49	Centre Gauge com. 60°, 55° and 29°	49	Centre Gauge com. 60°, 55° and 29° make stainees steel
50	Screw Pitch Gauge Whitworth & Metric each	50	Screw Pitch Gauge Whitworth & Metric each stainees steel
51	Drill Angle Gauge	51	rills are manufactured from the finest U.S. tools steels
52	Dial Test Indicator 0.01 mm with magnetic base	52	0-10mm dial in 0.01mm increments (metric) • Magnetic base with fine adjustment
53	Vernier Height Gauge with dial 300 mm L.C. 0.01 mm	53	Depth and Step Measurements, Stainless Steel, 0"/0mm-8"/200mm Range, +/- 0.001"/0.01mm Accuracy, 0.0005"/0.01mm Resolution
54	Try Square 150 blade	54	Blade 200 mm long with lasered mm scale Handle made of beechwood with brass rail
55	Magnifying Glass 75 mm dia.	55	2 lenses handheld magnifying glass+75mm material:plastic frame,with compass
56	Plain Ring and Plug Gauge 12 to 50 mm by 1mm	56	Plain Ring and Plug Gauge 12 to 50 mm by 1mm Make stainees steel
57	Wheel Dresser Huntingon-type with star cutter	57	Wheel Dresser Huntingon-type with star cutter made of cast iron.
58	Wheel Dresser Diamond (inserted-0.75 or 1 Carat)	58	Wheel Dresser Diamond (inserted-0.75 or 1 Carat) made of cast iron
59	Screw Thread micrometer interchangeable	59	Screw Thread micrometer interchangeablemake Material Type Carbide
60	Morse Taper Plug & Ring Gauge no. 0 to 7 MT	60	Morse Taper Plug & Ring Gauge no. 0 to 7 MT quality material like tungsten-based oil-hardened & non-shrinking steel
61	Sin Bar with centers 200 mm	61	Sin Bar with centers 200 mm Made from high quality alloy steel
62	Slip Gauge metric set (87 pieces in a Box)	62	Slip Gauge metric set (87 pieces in a Box) High Grade Steel / Carbide / Ceramic
63	Morse Taper Sleeves No. 0-1, 1-2, 2-3, 3-4, 4-5.	63	Precision engineered from high quality steel
64	Drill Drift	64	Drill Drift alloys like high carbon, titanium, high alloy and stainless steel, high temperature alloy, aluminum, bronze, cast & ductile iron
65	Twist Drill straight shank 1 to 12 mm by	65	1MM TO 12 MM straight shank twist drill bits are made from high quality of high speed steel
66	Twist Drill taper shank 10-12 mm by 0.5 mm	66	10-12 MM straight shank twist drill bits are made from high quality of high speed steel
67	Drill Chuck 12 mm cap with key	67	Drill Chuck 12 mm cap with key make allow steel
68	Tap & Die B.A. No. 0 to 10 in a box	68	Each high carbon steel tap and die has size and starting side permanently marked on each and box contains 0-10
69	Tap & Die metric set up to 25 mm	69	size upto 25mm Each high carbon steel tap and die has size and starting side permanently marked on each
70	Tap & Die B.S.F. up to 1 inch	70	1 inch high carbon steel tap and die has size and starting side permanently marked on each
71	Tap & Die B.S.W. up to 1 inch	71	1inch high carbon steel tap and die has size and starting side permanently marked on each
72	Reamer machine straight flute 6 to 25 mm	72	Reamer machine straight flute 6 to 25 mm make with high carbon steel

73	Reamer Adjustable 10 to 20 mm	73	Reamer Adjustable 10 to 20 mm high carbon steel
74	Tool Holder RH & straight for mm square tool bit	74	Tool Holder RH & straight for mm square tool bit high carbon steel
75	Parting Tool Holder with H.S.S. blade	75	These top quality parting tools are manufactured to high tolerances by Glanze.
76	Tool Bits 12 X 150 mm sq. assorted shaped	76	12*150 mm make with High Speed Steel Tool Bits
77	Boring Tool holder for 6 mm sq. tool bit	77	Boring Tool holder for 6 mm sq. tool bit high carbon steel
78	Steel Rule 300 mm with Metric and Inch	78	Steel Rule 300 mm with Metric and Inch stainees steel
79	Oil Can ½ pint (pressure feed system)	79	Oil Can ½ pint (pressure feed system) make mild steel
80	Dog Carrier 235, 50 and 75 mm	80	Dog Carrier 235, 50 and 75 mm made high carbon steel
81	Angle Plate with slots 200 mm	81	Angle Plate with slots 200 mm made high carbon steel
82	Spirit Level 0.05 meter 200 m	82	simultaneous measuring or levelling of surfaces on machines
83	Tool Maker's button	83	Tool Maker's button made alloy steel
84	Combination Drill A-2.5 and A-1	84	Combination Drill A-2.5 and A-1 made alloy steel
85	Oil Stone 12 mm sq. x 100 long fine	85	Oil Stone 12 mm sq. x 100 long fine made mild steel
86	Tap Wrench (adjustable)	86	This is manufactured using high grade raw materials sourced ,In order to ensure quality, this is stringently tested on various parameters.
87	Die Handle	87	Die Handle alloy steel
88	Tool Bit assorted sizes on holder	88	Tool Bit assorted sizes on holder make high speed steel
89	Machine Vice 100 mm jaw (For Drill Machine)	89	Premium quality swiveling milling vise features perfectly aligned, precision ground jaws, large Acme screw and easy to read 0 - 360 degree
90	Chalk Board on mobile stand	90	manufacturer of high quality Ceramic steel Chalk Board
91	Spare Grinding Wheel Ajax type for carbide tool	91	High-speed grinding wheels made in Diamond or CBN
92	Almirah-1980x 910 x 480 mm	92	Steel Almirah
93	St. Locker with drawer (Pigeon holes)	93	St. Locker with drawer (Pigeon holes) steel
94	Desk	94	Desk wooden
95	Stool 1 No. 4 Nos.	95	Stool wooden
96	Angle Gauge for tool grinding	96	Angle Gauge for tool grinding stainees steel
97	Hand Chaser M-12 & M-16 (External)	97	Hand Chaser M-12 & M-16 (External) make Carbon and Alloy Steel
98	Hand Chaser M-12 & M-16 (Internal)	98	Hand Chaser M-12 & M-16 (Internal) make Carbon and Alloy Steel
99	Revolving Centrer (to suit Lathe tailstock)	99	Revolving Centrer (to suit Lathe tailstock) made alloy steel
100	Tool Cemented carbide assorted shaped (External) for stell turning	100	Tool Cemented carbide assorted shaped (External) standard high speed steel tools
101	Thread Plug Gauge M-20 & M-21	101	Thread Plug Gauge M-20 & M-21 stainees steel
102	Thread Ring Gauge M-20 & M-21	102	Thread Ring Gauge M-20 & M-21 make stainees steel
103	Machine Chase M-12TO m-21 (Std. Series) to suit on	103	Machine Chase M-12TO m-21 (Std. Series) to suit on make Carbon and Alloy Steel

104	Coventry Die head	104	Coventry Die head using high grade steel.
105	Gauge Drill Grinding	105	Gauge Drill Grinding make stainless steel
106	Magnetic Chuck 150 mm dia.(Circular type)	106	Each Block incorporates 4 different sized Vee's thereby supporting a wide range of size
107	Lathe Mandrels (Diff. Types)	107	Contains mandrel with spacers, three buffs, Tripoli and white diamond compounds and
108	Coventry Type Die Head (Self opening)	108	1/4" to 1" (Threading Capacity)3/8" to 1 1/2" ... Cutting Die Head as comparison to Coventry type self opening Die Head
109	Collapsible Tap with attachment	109	The tripod socket is now part of the body, not simply attached to the removable Collapsible M
110	Combination Drill	110	Combination Drill make high speed steel
111	Fire Extinguisher and buckets	111	Combination Drill make high speed steel
112	Bore dial gauge stems – 12 to 35 mm, 35 to 65 mm., dial gauge indicator of 0.01 accuracy.	112	Fire Extinguisher and buckets Manufacturer and Supplier of Fire Safety Products, Fire Bucket, Fire Blanket, Fire Extinguisher, Fire Resistant Suit and Hose Pipe
C : MACHINERIES AND EQUIPMENTS			
113	Lathe S.S. & S.C. (All geared head stock) 15 cm centerheight, to admit 120 cm between centers. Machine to be motorized and supplied with coolant installation, 1-jaw independent chuck 250 mm, 3-jaw self-centering chuck 150mm, fixed steady, traveling steady, face plate, driving plate, 4-way tool post, quick change gear box for Metric or British threads, live and dead centers with taper attachments.	1	Lathe S.S. & S.C. (All geared head stock) 15 cm center height , to admit 120 cm between centers . Machine to be motorized and supplied with coolant installation, 1-jaw Independent chuck 250 mm, 3-jaw self-centering chuck 150 mm, fixed steady, traveling steady, face plate, driving plate, 4- way tool post, quick change gear box for Metric or British
114	Lathe S.S & S.C.(all geared type) 20 cm. Center height, 120 cm between centers, gap bed machine to be motorized and supplied with coolant installation, 4-jaw independent chuck, 300 mm , 3-jaw self-centering chuck 200 mm fixed steady, face plate, driving plate, 4-way tool post, quick change gear box for Metric/British threads, live and dead centers with taper attachments.	2	Lathe S.S & S.C.(all geared type) 20 cm. Center height, 120 cm between centers, gap bed machine to be motorized and supplied with coolant installation, 4-jaw independent chuck, 300 mm , 3- jaw self-centering chuck 200 mm fixed steady, face plate, driving plate, 4-way tool post, quick change gear box for Metric/British threads, live and dead centers with taper attachments.
115	Lathe tool room S.S. & S.C. (all geared type) 15 cm centerheight, 120 cm between centers. Machine to be motorized and supplied with coolant installation, 1-jaw independent chuck 250mm, 3-jaw self-centering chuck 150 mm fixed steady, traveling steady, face plate, driving plate, 1-way tool post, draw in type collets set up to 25 mm, 0.5 mm, relieving attachments.	3	Lathe tool room S.S. & S.C. (all geared type) 15 cm center height, 120 cm between centers. Machine to be motorized and supplied with coolant installation, 1-jaw independent chuck 250 mm, 3-jaw self-centering chuck 150 mm fixed steady, traveling steady, face plate, driving plate, 1-way tool post, draw in type collets set up to 25 mm, 0.5 mm, relieving attachments.

116	Grinding machine pedestal type D.E. 150 mm dia. Wheel with wheel guard and vision.	4	Grinding machine pedestal type D.E. 150 mm dia. Wheel with wheel guard and vision.
117	Grinding machine pedestal type E.E. 150 mm dia. Wheel with wheel and vision guard	5	Grinding machine pedestal type E.E. 150 mm dia. Wheel with wheel and vision guard
118	Drill machine pillar type-motorized up to 12 mm. Cap.	6	Spindles are supported by precision ball bearings, Hinged steel belt and pulley cover for easy access Precision worktable with T-slots, tilts 45° to each side and swivels 360°
119	Power saw machine – hydraulic feed system – 400 mm. Blade size.	7	Saw head unit is supported by two rigid hard- chrome plated & ground vertical columns, which are guided by self lubricated bushes. The blade is guided by bearings & carbide wear pads. The blade can be tightened and released hydraulically. The blade is hydraulically tightened up to recommended tensile strength of the saw blade. The saw is driven by sufficient drive power to cut material.

D:List of additional machines, tools & equipment for two units (CNC)

120	CNC turning center dia. 150 mm., between center distance 500 mm. At least 8 station turret. Preferably with a popular controller like Fanuc, Siemens, etc.	1	<p>Specifications</p> <ul style="list-style-type: none"> •CAD-CAM compatibility. • FANUC Emulated Key Board. • Table Locking facility with stepper motor • Powerful stepper Motors for axis control. • Powerful PC software for graphics. • Display of Actual Feed rate, Spindle speed • Automatically detects wrong steps in programming. • Safety Functions with Emergency Stop, Over • Alarm & self Diagnostic Functions. Centre Height- 100 mm <p>Swing Over Carriage- 60 mm Distance Between Centre- 200 mm Max. Machining Diameter- 30 mm Max. Longitudinal Travel- 300 mm Spindle Speed (with Back Gear)- 40 to 2000 RPM Cross Slide Inclination- 0 Degrees, Standard Cutting Tool Size- 16 x 16 mm Spindle Motor- DC Motor, 1 HP, Thread Cutting- Straight, Automatic Lubrication Points- Provided Input System- Metric / Inch Control Axis- Simultaneous axis Interpolation- Linear, Circular, Parabolic & Elliptical , Minimum Increment- 0.005 mm Minimum Movement Command X-0.005mm Minimum Movement Command Z-0.005mm Repeatability- + 0.020 mm Feed Rate X & Z- 400 mm/min Rapid feed rate X & Z- 800 mm/mm Programmable Dwell (seconds)- Programmable Tool Offset with Turret- 8 nos. Backlash Compensation- Provided Speed Over Ride- 40%- 160% Feed Over Ride- 20%- 120% Type Of Control System- PC Based System Real Time Tool Path Simulation- Provided CNC trainer tools assorted – 01 Set CNC Boring tool assorted – 01 Set</p>
121	Multimedia teachware for CNC technology and interactive CNC machine simulators with console emulator software of popular control system makes : Fanuc, Siemens, Mitsubishi, etc. 1 for faculty, 10 for students	2	CNC Turning Tools assorted as per one trainer tool holder specification
122	Multimedia teachware for CNC technology	3	Multimedia teachware for CNC technology
123	CNC Turning Tools assorted	4	CNC Grooving tools (External & Internal) as per one trainer tool holder specification
124	CNC Boring tools assorted	5	CNC Boring tools assorted as per one trainer tool holder specification
125	CNC Grooving tools (External & Internal)	6	CNC Grooving tools (External & Internal) as per one trainer tool holder specification
126	LCD projector / large screen TV	7	LCD projector / large screen TV

127	Digimatic Electronic Vernier Caliper inch and mm 8"/200 mm. LCM 0.005"/0.001 mm	8	Digimatic Electronic Vernier Caliper inch and mm 8"/200 mm. LCM 0.005"/0.001 mm
128	Digimatic electronic outside Micrometer (0 to 25 mm & 25 to 50 mm) LC 0.001 mm.	9	Digimatic electronic outside Micrometer (0 to 25 mm & 25 to 50 mm) LC 0.001 mm.