

Name of the Trade				
Instrument Mechanic				
S.No.	Name of the item	Std List No.	Type of the item (Tool / Equipment /	Specifications
(i)	(ii)	(iii)	(iv)	(v)
1	Steel Rule 150 mm (metric and English Marking)	1	T.Tool kit	150mm BRITISH/ Metric Graduation Material stainless steel (ISI)
2	Watch maker screw driver (set of six)	2	T.Tool kit	1X 6 pic miniature screwdriver set with Non-slip studded handle
3	Plier flat Nose 100 mm	3	T.Tool kit	100mm flat nose plier made of Stainless Steel
4	Hammer ball pain 250 gms. With handle	4	T.Tool kit	250gms ball pein hammer ,Hardernd and tempered face and hard wood handle
5	Tweezer fine point 125 mm	5	T.Tool kit	125 mm fine point tweezer With PVC insulation of SS
6	File hand smooth 200 mm	6	T.Tool kit	A standard file 200mm ,smooth type with handle
7	File Flat 2 nd cut 200 mm	7	T.Tool kit	A standard file flat 200mm ,2nd cut type with handle
8	Screw driver set of 5 pieces	8	T.Tool kit	high speed steel,chrome plated,pvc handle
9	Adjustable spanner	9	T.Tool kit	Manufactured from chrome vanadium steel with a highly polished chrome plated finish.
10	Try square hardened blade 100 mm	1	General Shop Outfit	100mm blade is made from hardened and tempered steel With heavy base
11	Neon (phase) tester 230 volt	2	General Shop Outfit	230 V With trasperent handle and with sleeve
12	Eye glass 3" focus watch maker	3	General Shop Outfit	size of 3" With alluminium frame
13	Surface plate 400x400 mm	4	General Shop Outfit	400*400 mm made of Hardered and tampered with bottom ribs and side handles
14	Universal scribing block 250 mm plier	5	General Shop Outfit	250mm With hardened amd tampered scriber
15	Angle plate 150x100	6	General Shop Outfit	150*100 plate Fixed With grove on one side
16	Vee block with clamp pair	7	General Shop Outfit	clamp Made of cast Iron And carbon steel
17	Punch frame set 2 mm	8	General Shop Outfit	size of frame is 2mm
18	Hacksaw frame adjustable 200 - 300 mm	9	General Shop Outfit	200-300mm type with handle
19	Hammer ball pain 450 gms, with handle	10	General Shop Outfit	450gms ball pein made of Hardernd and tempered face with hard wood handle
20	Electric soldering iron 6 watt pencil tip	11	General Shop Outfit	6 watt pencil tip
21	Vice bench jaw 100 mm	12	General Shop Outfit	100mm jaw , box nut made of gun metal
22	Pointer extractors (puller)	13	General Shop Outfit	4" with hardened and tampered legs
23	Screw pitch gauge B.A. & metric each	14	General Shop Outfit	hardened and tampered blade
24	Punch center 100x10 mm	15	General Shop Outfit	100*10mm Hardernd and tempered round in shape with knurled grip
25	Tool maker's clamps 65x15x25 mm opening	16	General Shop Outfit	65*15*125 mm steel
26	Plier side cutting 150 mm	17	General Shop Outfit	150 mm side cutting plier With insulated handle
27	Sine bar 125 mm plate	18	General Shop Outfit	125mm plate With side roller
28	Flaring tool set	19	General Shop Outfit	3/16" to 5/8" O.D.Tubing
29	Micrometer outside 0 to 25 mm	20	General Shop Outfit	Carbide tipped measuring faces, metallic finish frame,With 0.01 mm least count with ratchet stop and locking device
30	Micrometer outside 25 to 50 mm	21	General Shop Outfit	Carbide tipped measuring faces, metallic finish frame,With 0.01 mm least count with ratchet stop and locking device standard piece of 25mm
31	Vernier height gauge 300 mm	22	General Shop Outfit	300mm size with accuracy 0.02mm with magnifying glass
32	Combination set 300 mm	23	General Shop Outfit	300mm With hardened and tampered blade and scriber
33	Vernier caliper 150 mm	24	General Shop Outfit	150mm size Accuracy 0.02mm With fine adjustment screw
34	Standard wire gauge	25	General Shop Outfit	made of hardened and tampered
35	Feeler gauge leaf type, 26 blades, eng.& metric	26	General Shop Outfit	With hardened and tampered blades
36	Radius gauge leaf type 1 to 15 mm	27	General Shop Outfit	1 to 15mm With hardened and tampered blades
37	Dial test indicator in mm with accessories.	28	General Shop Outfit	size in mm With magnatic base
38	Micrometer inside 25 mm with extension up to 150 mm	29	General Shop Outfit	25mm with extension upto 150mm With least count of 0.01mm
39	Combination plier heavy duty 150 mm	30	General Shop Outfit	150mm With thick insulation
40	Fire buckets	31	General Shop Outfit	20 kg Withstand heavy duty angle
41	Tube cutter	32	General Shop Outfit	Heavy duty with reamer and 2 extra blade
42	Tube bender	33	General Shop Outfit	With die and angle marking, size ¼", 3/8", 1/2 " 1 each
43	Pinching tool	34	General Shop Outfit	Material:Steel, Plastic
44	Allen key set (metric)	35	General Shop Outfit	made of chrome steel alloy dimension upto 2mm to 14mm
45	Allen key set (English	36	General Shop Outfit	made of chrome steel alloy dimension upto 2mm to 14mm

46	Soldering station (temp. controlled)	37	General Shop Outfit	25W temp. control with digital display
47	Screw driver 200 mm	38	General Shop Outfit	200 mm With thick PVC sleeve
48	Philips screw driver 200 mm	39	General Shop Outfit	200mm With thick PVC sleeve
49	Round nose plier 150 mm	40	General Shop Outfit	150mm With insulated handle
50	Magnifying glass 75 mm	41	General Shop Outfit	75mm With metal frame
51	Slip Gauges (workshop grade)	42	General Shop Outfit	Range MM 1.001-1.009 1.01-10.9 1.1-1.9
52	Fire extinguishers	43	General Shop Outfit	Fire extinguishers (foam type and CO2 type) 5 Ltr
53	Plug gauge	1	Mechanical Precision Instruments	Tungstun carbide grounded and precision laps of any size
54	Ring gauge	2	Mechanical Precision Instruments	Tungstun carbide grounded and precision laps of any size
55	Snap gauge	3	Mechanical Precision Instruments	Tungstun carbide grounded and precision laps of any size
56	Surface gauge	4	Mechanical Precision Instruments	Hardened and tampered scriber with square base and V groved
57	Telescopic gauge	5	Mechanical Precision Instruments	accurate indoor measurements from 5/16" to 6". The long rods make it easy to reach inside bores. The telescoping gauge set features spring loaded, self centering plungers and twist knobs for measurement locking. With a vinyl carrying case
58	Vernier bevel protractor	6	Mechanical Precision Instruments	With magnifying glass with accuracy of 5 min. with all accessories
59	Dividers, 250 mm	7	Mechanical Precision Instruments	size 250mm with Hardened and tampered edge spring type
60	Gauge blocks	8	Mechanical Precision Instruments	Practical master gage for dimensional measurement Two types of steel and ceramic gauge blocks are available. Four classes of Class K, Class 0, Class1, and Class 2
61	Monochromatic light source	9	Mechanical Precision Instruments	LED high power lamp beads blue light beads 30W LED plant light source monochromatic blue light phototherapy lamp beads beads
62	Wire type strain gauge (load cell/cantilever beam) instrument	10	Mechanical Precision Instruments	load cell/cantilever beam
63	Vibrometer sensing elements	11	Mechanical Precision Instruments	Laser Dual Class 2 laser source Optics Long-range lens, manual focusing, min. stand-off distance 5 m Range 5 m ... >300 m depending on target reflectivity and amplitude Operating temperature +5 iC ... +40 iC (41 iF ... 104 iF) Total weight approx. 30 kg (including storage case, excluding tripod
64	Accelomerter	12	Mechanical Precision Instruments	Accelerometer type: Piezoelectric, range: ± 500 g peak, Temperature range: -50°C to $+100^{\circ}\text{C}$ operating -65°C to $+125^{\circ}\text{C}$ storage/nonoperating
65	Sesmic instruments	13	Mechanical Precision Instruments	Base Plate Size Length x Width All Models 6.0" x 3.5" (152.4 mm x 88.9 mm) Top Plate Size Length x Width (152.4 mm x 88.9 mm)
66	Load cells of various ranges	14	Mechanical Precision Instruments	10m long PVC insulated cable along with voltage sensing and mating binder socket,Accuracy class : 0.1 or better, Nominal Sensitivity : 2mV/V
67	Speedometers (at least four different popular make) with adopters of various sizes	1	Rotational/velocity Instruments	LED illuminated needle for maximum visibility. 80mm visible dial dimension, requires 85mm cutout
68	Centrifugal type tachometer	2	Rotational/velocity Instruments	Digital type, Large 1/2 inch 4-digit LED display
69	Drag cup type tachometer	3	Rotational/velocity Instruments	1/4 FULL WAVE N RECTIFIER H "a AC HIGH PASS AMPLIFIER FILTER RECORDER .6 ,DC LOW PASS AMPLIFIER FILTER
70	Electrical tachometer	4	Rotational/velocity Instruments	counting Speed 30 Hz (minimum pulse width: 16.7 ms)
71	Chronometric type tachometer	5	Rotational/velocity Instruments	Tachometer has three ranges: low (50 to500 rpm), medium (500 to 5,000 rpm), and high (5,000 to 50,000 rpm).
72	Digital type tachometer	6	Rotational/velocity Instruments	The display may be LED or LCD, analog user inputs such as potentiometers, dials, or switches.,programmed through the front panel using a digital keypad
73	Stroboscope	7	Rotational/velocity Instruments	50 to 40,000 FPM
74	Digital panel meters, 4 digit	1	Precision Instruments	Display ranges in Voltmeter, Current meter, Wattmeter, Ampere meter, self mounting high proformance with cords and clips
75	Digital line frequency indicator	2	Precision Instruments	Range 45.00Hz to 99.99Hz, Resolution 0.1 Hz, 4 digit LED 230V AC 50 Hz, option volt 12/24/110/440/1100V AV Upto 99 Frequency
76	D.C. regulated power supply (+/- 15V / +/- 30V)	3	Precision Instruments	DC output:A : 0-30V, @A, continuously variable by means of Coarse and fine controls, B : 5V, 2A adjustable from 4V -6V, C: 0- +15V, 1A Dual Tracking adjustable

77	Digital multi signal generator (1 MHz) with frequency counter (8 digit or 10 MHz)	4	Precision Instruments	Frequency of 1Mhz with couter of atleast 8digit or 8 Mhz
78	Digital function generator	5	Precision Instruments	5MHz with AM/FM
79	Pulse generator	6	Precision Instruments	10MHz Pulse Generator with Delay. 0.1Hz to 10MHz frequency range
80	Digital insulation tester	7	Precision Instruments	31/2 digits, battery cum mains operated for 100V/200M
81	Digital multimeter	8	Precision Instruments	41/2 digits, backlit LCD, data hold , AC/DC voltage, AC/DC current, resistance, capacitance, frequency, temperature, diod and countinuitytest
82	Analog multimeter	9	Precision Instruments	AC/DC volt upto 100V or above DC current resistance, countinuit, battery and transistor test dB measurement and temprature using optional probe
83	Digital L.C.R. bridge	10	Precision Instruments	33/4 digits backlit, LCD dual display T-RMS, RS-232PC Interface, Internal memory,Min., Max, Avg, Relative Modes, AC/DC Voltage, AC/DC current, resistance, capacitance, inductance, frequency, duty cycles, temperature dBm, Logic, Diode, Signal output and continuity test
84	Digital I.C. tester	11	Precision Instruments	Test 6-40 pins ic's in DIP package the list include 74/54, 40/45, 93/96 series ic's , EPROMS, RAMS, peripheral ic's microprocessor(8088/8085/Z80/6502) and other digital ic's, Automatic testing of variety of ic's , potential free 40 pins universal ZIF socket , six seven segments display to show ic number pass fail status operation display battery and main operated audio alarm to user when its required. Portable size
85	Analog dual trace CRO 30MHz	12	Precision Instruments	Max vertical sensivity 1MB/division TV-V, TvH, sync seprator alternate trigger Z-axis TTL level max TB speed six inch rectangular type cathode ray tube max. sensitivity of 5MB
86	Decade resistance boxes	13	Precision Instruments	Three dials of 1 Ω , 10 Ω , 100 Ω or 10 Ω , 100 Ω , 1000 Ω select any range, four dial of 1 Ω , 10 Ω , 100 Ω , 1000 Ω or 10 Ω , 100 Ω , 1000 Ω , 10000 Ω select any range, five dials of 1 Ω , 10 Ω , 100 Ω , 1000 Ω , 10000 Ω , six dials of 1 Ω , 10 Ω , 100 Ω , 1000 Ω , 10000 Ω 100000 Ω , metal film resistance of 0.5 W in wooden/ bakelit box any vale from 10 Ω to 10 Ω
87	Decade capacitance boxes	14	Precision Instruments	Two dials of 0.001, 0.001 μ F or 0.01 μ F or 0.1, 1 μ (select any one range) three dials of 0.001, 0.001 μ F or 0.01 μ F or 0.1, 1 μ (select any one range) four dials of 0.001, 0.01, 0.1 1 μ F, paper condenser in balekite/wooden box any value from 0.001 μ F
88	Decade inductance boxes	15	Precision Instruments	Two dials of 0.1 mH, 1 mH to 1 mH, 10 mH or 10 mH, 10 mH or 100 mH, 1H (select any range) three dials of 0.1mH, 1mH, or 1 mH, 10mH or 10 mH, 100mH or 100 mH, 1H (select any range)four dials of 0.1mH, 1mH, 10 mH, 100 mH or 1mH, 100 mh, 1H Air core inductance in wooden box any value 0.1mH to 1H
89	Transistor tester	16	Precision Instruments	With leads and NPN,PNP transistor atleast two with it
90	Instrumentation amplifier trainer	1	General Equipment Trainers for Instrumentation	Resistive Load cell is used to measure Load up to 3 KGs. Primary Excitation voltage of 12V DC. On-board Digital Panel Meter provided. Output available on 2mm Banana sockets for Monitoring.
91	Trainers on network circuits i.e. Kirchoff's law resonance	2	General Equipment Trainers for Instrumentation	Current source Voltage source A step down transformer to feed AC input for AC network study One potentiometer to vary the DC current One potentiometer to vary the DC voltage One potentiometer to set the Rth externally Two 'T' type network for AC & DC circuits
92	electromagnetic and transformer	3	General Equipment Trainers for Instrumentation	The transformer has a waterproof case. The transformer satisfies military standards or specifications (MIL-SPEC). IEC electrical metering standards.
93	Trainers on linear circuits i.e. operational amplifiers	4	General Equipment Trainers for Instrumentation	Built-in DC regulated power supply with short circuit protection and led indication for supply "on" to works on 230v ac mains.
94	Trainer on basic digital electronics i.e. logic gates Boolean Expression adder subtractor flip flop counter register converter etc	5	General Equipment Trainers for Instrumentation	Completely self-contained stand alone unit. Built in IC based DC regulated power supply. Test points provided on panel at various stages in the circuit. Set of required number of Patch cords. Strongly supported by a comprehensive instruction manual complete with theory and operating details.
95	Trainers on power supplier's half wave rectifier full wave	6	General Equipment Trainers for Instrumentation	2 metres to measure output voltage and output current,4 PN Junction diodes,filter circuit kit
96	rectifier bridge rectifier and power supply regulated power supply	7	General Equipment Trainers for Instrumentation	step load change from 0 to 100% load,Startup Time: 400 mS maximum (250 mS typical.).Load Regulation: 3.3v to 48v Models: \pm 0.05% or 5 mV, whichever is greater. 50v to 125v Models: \pm 0.1%,Drift: \pm 0.1% maximum over 8 hours, after 30 minute warmup.
97	SCR driven/controlled power supply trainer	8	General Equipment Trainers for Instrumentation	UPS (0.3kVA – 1.0 MVA) Inverters (2kVA – 160kVA) Chargers/rectifiers (5A – 2000A) and DC systems Power controllers up to 6000A

98	Discreet component trainer	9	General Equipment Trainers for Instrumentation	<ul style="list-style-type: none"> • Useful, low cost, multi-purpose, mini-lab for all basic experiments in linear, digital & hybrid circuits using Discrete Component Trainer • Low Cost • Multi purpose Mini Lab • Solderless Experiments possible • 2mm Inter Connection • Multi output DC Regulated Power Supplies with short circuit protection • Detailed Manual • 2 mm Stackable Patch Cords
99	Trainer on RS485 to RS232 converter.	10	General Equipment Trainers for Instrumentation	Max. distance 1.2 km Fully compatible with PC serial COM ports No external power supply required (port-powered) Optional external DC power supply (7~12VDC) Built-in surge protector up to 15kV RTS auto toggling Communication status can be monitored using LEDs DIP switch for RS422/485 mode selection Max. 10 device connectivity for RS422 multi-drop mode Max. 32 device connectivity for RS485 mode
100	DC moving coil miliammeters(various ranges)	1	Electrical Instruments	Core clear transparent front cover , with knife edge pointer and parallax mirror scale desk stand front terminal unbreakable ABS plastic /backlite body 10,30,100mA
101	Centre zero galvanometers	2	Electrical Instruments	Core clear transparent front cover , with knife edge pointer and parallax mirror scale desk stand front terminal unbreakable ABS plastic /backlite body 30-0-30 division sensivity of 20μA/ division
102	AC moving iron type voltmeter (various ranges)	3	Electrical Instruments	Core clear transparent front cover , with knife edge pointer and parallax mirror scale desk stand front terminal unbreakable ABS plastic /backlite body 0-250, 0-600, multi range 0-300-600
103	AC moving iron type ammeter (various ranges)	4	Electrical Instruments	Core clear transparent front cover , with knife edge pointer and parallax mirror scale desk stand front terminal unbreakable ABS plastic /backlite body 0-10. 0-25 or 30, 0-50
104	Wattmeter dynamometer type	5	Electrical Instruments	Core clear transparent front cover , with knife edge pointer and parallax mirror scale desk stand front terminal unbreakable ABS plastic /backlite body Portable single phase any one current range .5- A to 20A ant two voltage range 50/100V, 150/300V, 300/600V, 250/500V
105	Power factor meter	6	Electrical Instruments	Portable three phase three wire double element anty two current range .5/1A, 1/2A, 2.5/5A, 5/10A, 15/30A, any two voltage range 125/250V, 250/500V
106	Watt hour meter induction type 1 ph	7	Electrical Instruments	Core clear transparent front cover , with knife edge pointer and parallax mirror scale desk stand front terminal unbreakable ABS plastic /backlite body
107	Ampere hour meter	8	Electrical Instruments	10A
108	Ohm meter	9	Electrical Instruments	Resistive Load cell is used to measure Load up to 3 KGs. Primary Excitation voltage of 12V DC. On-board Digital Panel Meter provided. Output available on 2mm Banana sockets for Monitoring.
109	Synchromoscope	10	Electrical Instruments	Instrument function: Revolving pointer system. Indicating the synchronising moment when frequency and phase of both supplies have the same values. Then the pointer will be on the upper centre of scale. Instrument case: steel-plate. Frequency: For single phase 50 Hz ±1% or 60 Hz ±1%. For three phase 50 Hz ±3% or 60 Hz ±3% Consumption: Line approx. 20 mA Generator approx. 20 mA.
110	Potentiometer / thermocouple test set	11	Electrical Instruments	Solid-State Potentiometer 3-Wire Serial Up/Down Interface 100 Wiper Tap Points.Low Power CMOS VCC = 2.7V to 5.5V, and 5V ±10% Standby Current <5μA
111	Autotransformer	12	Electrical Instruments	460 Volts, 3 Phase, 60 Hz Contactors: 230 Volts AC
112	Calibration test bench for AC and DC voltmeter, AC and DC Ammeter, ohmmeter	13	Electrical Instruments	bench fitted with Voltmeter,ammeter,ohmmeter
113	" U" tube manometers	1	Pressure Instruments	"U" Tube type Primary standard Manometer used for precision measurement of pressure, vacuum, differential pressure, and flow measurement in plants and labs where certain accuracy is required. In Wall mounted /stand mounted. 50-0-50 /250-0-250 mm
114	Well type manometer	2	Pressure Instruments	Ruggedized well-type manometers 303 SS 0 to 30" H2O Liquid filled – water
115	Inclined limb manometers	3	Pressure Instruments	CVG solid acrylic body portable manometers are fabricated from 1 inch.Thick acrylic plastic solid block, vertially unbreakable stable and free of distortion. PVC plastic engraved scale, zero adjusting knob, level bottom and panel mounting holes provide with manometer 200 mm wg.

116	Bourdon tube type gauges of various ranges	4	Pressure Instruments	Nominal size 100mm accuracy class 1,6 Adjustment at the back side of the case 0 to 100 mbar
117	Capsule type pressure gauges	5	Pressure Instruments	Dial size in mm 100,Open front cylindrical case, optional with blow out disc at the back Externally,Measuring principle Capsule Range in any mbar 6 10 16 -6/0 -10/0 -16/0 25 40 60 100 160 250 400 -25/0 -40/0 -60/0 -100/0 -160/0 -250/0 -400/0,Pressure type Continues service up to maximum rating, alternating service up to 90 % F.S
118	Aneroid barometers	6	Pressure Instruments	Range 26.9 to 31.3" of mercury 910 to 1060 millibars 682 to 795mm of mercury Accuracy* 910- 927 mb, ± 1.00 mb Black, Enameled Aluminum
119	Dead weight tester	7	Pressure Instruments	A hydraulic dead weight tester with following technical specification:- Range: 0 to 1000kg/cm2 Accuracy +0.02% of reading or better. No. of piston: one, a set of BSP adaptor of 3/8, 1/2, 1/4, 1/8 inches with male thread of half " should be supplied with set.
120	Pressure regulators with filter and input & output gauges	8	Pressure Instruments	Input and output gauge
121	Differential pressure transmitter (pneumatic)	9	Pressure Instruments	Zero-based calibrated span, linear output, wetted parts material code S,
122	Differential pressure transmitter (electronic -HART/field bus type)	10	Pressure Instruments	0.04% Accuracy (0.025% Accuracy option available) 0.1% per 10 years Stability 3,600 psi MWP 90 msec Response Time Local Parameter Setting (LPS)
123	Diaphragm type pressure gauges of various ranges	11	Pressure Instruments	Dial size 100mm construction open front cylindrical case, optional with blow out disc at the back Solid front safety pattern cylindrical case with blow out at back Overpressure limit 0 to 100 bar
124	Pressure transducers training kits Potentiometer Capacitive Reluctive strain gauge LVDT Load cell Servo type	12	Pressure Instruments	TECHNICAL SPECIFICATIONS Parameter Measured : Pressure (Kg/ cm2) Measurement System : Transducer with electronic instrumentation.Transducer Range : 0 to 5 Kg/cm^2. Sensor : Variable capacitor.Excitation Source : 12V DC (Regulated).Termination of Transducer : 1/2" B.S.P. Power Requirements : 230V, ± 10% AC 50Hz, 1 phase. Panel Size : 10" x 13".Standard Accessories : Detailed Instruction Manual.Foot pump of capacity (max) : 7 Kg. TECHNICAL SPECIFICATIONS Parameter Measured : Pressure (Kg/ cm2)Transducer Range : 0 to 5 Kg/cm2. Sensor : Linear Resistor Potentiometer. Excitation Source : 5V DC (Regulated). Termination on Metal bellow : 1/4" B.S.P.
125	Experimental set up for pressure measurement consisting of air compressor pressure vessel pressure transmitter controller recorderand final control element, computer i.e. closed loop system or full scope system i.e. pressure instrumentation process control trainer / simulator	13	Pressure Instruments	
126	HART device communicator and calibrator	14	Pressure Instruments	
127	Pneumatic calibrator	15	Pressure Instruments	mA 0 to 25.00 0.01mA ,Accuracy±0.05% of F.S. + 2 Digits Switch Test 5 V DC Nominal Over Pressure Alarm 2% of F.S.Display 2 X 16 Alpha Numeric Display pressure Units bar,psi,kg/cm2,MPa,mmHg,atm,mH2O, inHg,inH2O,ftH2O,cmH2O,kPa,mbar.

128	Electronic (HART/Field bus/profibus type device compatible) calibrator	16	Pressure Instruments	<p>FUNCTIONAL SPECIFICATIONS</p> <p>Output "0"</p> <p>Two wire 4 to 20 mA DC output with digital communications, linear or square root programmable. BRAIN or HART FSK protocol are superimposed on the 4 to 20 mA signal.</p> <p>Output range: 3.6 mA to 21.6 mA</p> <p>Output limits conforming to NAMUR NE43 can be pre-set by option code C2 or C3.</p> <p>Failure Alarm (Output signal code D, E and J)</p> <p>Analog output status at CPU failure and hardware error;</p> <p>Up-scale: 110%, 21.6 mA DC or more (standard)</p> <p>Down-scale: ±5%, 3.2 mA DC or less</p> <p>Analog output status at process abnormality (Option code /DG6);</p> <p>The result of process abnormality detected by the advanced diagnostic function can be reflected to an analog alert status. The following three setting modes are available.</p> <p>Burnout Fall back Off</p> <p>Standard 110%,</p> <p>21.6mA or more Holds to a specified value within the output range from 3.6mA to 21.6mA</p>
129	Pressure switches of various ranges	17	Pressure Instruments	
130	Low pressure measuring gauges such as thermal conductivity gauge and Mcloyd gauge	18	Pressure Instruments	<p>service:Compatible gases & liquids.Wetted Materials:Brass and beryllium copper.Housing:Drawn steel, black finish.Lens:Polycarbonate (removable).Accuracy:±1.5% full scale.Pressure Limit:100% of range scale.Temperature Limits:Process: -40 to 160°F (-40 to 70°C); Ambient: -40 to 140°F (-40 to 60°C).</p>
131	P to I and I to P converters	19	Pressure Instruments	Low air consumption, high output volume
132	Vacuum tester with pump	20	Pressure Instruments	voltages from 10 to 60 kV DC
133	Vacuum gauge 100 mm dial bourdon tube type	21	Pressure Instruments	Size 100mm dia 3/8 BSP thread upto 700 pound
134	Simple tank type quantity meter	1	Flow meters / Instruments	Tubular gauge visual liquid level observation, it is simple and reliable device for direct reading in atmosphere or pressurized tank applications. It is mounted parallel along the side of the tank. New bolted gland with taflon packing ensures positive leaktightness for full vacumm as well as 10 kg/cm pressure service 16/19/25mm O.D. borosullicate glass gives excellent visibility. Full vacumm or 10kg/cm compressed air. Atleast 50 L capacity.
135	Impeller type flow meter	2	Flow meters / Instruments	Diameter 45/70mm, length 1.57m, max. temp. 70°C or extended range, Max. pressure 20 MPa or extended, natural gamma detector 50mmx25mm NaI(Tl) scintillation crystal
136	Below and liquid seal drum type flow meter	3	Flow meters / Instruments	Below and liquid seal drum type flow meter
137	Deflecting and rotating vane type flow meter	4	Flow meters / Instruments	Power supply: 12-28 VDC Power consumption: 10 mA Pulse output: PNP, open collector, max. 25 mA Electrical connection: plug connector M12x1
138	Helical and turbine flow meter	5	Flow meters / Instruments	Material if construction- body type 303 stainless steel, rotor type 416 stainless steel, rotor shaft type 303SS, ball bearing type 440SS, rotor support(flow straightner) type- 303SS, turndown ratio-10:1, accuracy ±0.5% of reading, operating pressure 4000PS/Max, operating temp. 60°F + 35°F
139	Pitot tube flow meter	6	Flow meters / Instruments	Tube type mounting, material, flange type, detector, anchor weight, flexible, JIS.10K100A, PVCpvc tube, 304SS, mounting size,A=JIS.5K to 100A(std), B=JIS.10K to 100A, 100PVC flexible type, length 4m (std) 110=SUS304 stand pipe type , length 100m.
140	Orifice type flow meter	7	Flow meters / Instruments	<p>Pipeline throttling: 100,125,150,200 any size</p> <p>Bore: 25,65,175</p> <p>Throtting β: standard orifice: .44,0.52,0.65</p> <p>Material water dry gas,wet gas, steam, preasure range normal preasure 2.5MPa, 4.0Mpa any</p> <p>Flowing range : same as the traditional standard orifice flow meter</p> <p>Accuracy 1%</p> <p>Power supply 24V dc/220 AC</p>
141	Ventury tube flow meter	8	Flow meters / Instruments	<p>Specifications</p> <p>Calibration of Venturi meter & Orifice meter for different Flow Rates</p> <p>Complete Re - Circulation type Equipment</p> <p>Compact Setup as compared to Conventional Setup</p> <p>Consists of a Sump Tank, Measuring Tank & Mono-block Pump etc.</p> <p>suitably mounted on a sturdy base frame</p> <p>To prevent rusting, Tanks are made up of M.S. sheet with powder coating</p>
142	Rotameter	9	Flow meters / Instruments	<p>Suitable for online installation with flanged or screw connection with several options of materials for wetted parts.</p> <p>15 NB to 100 NB</p> <p>2.5 to 40,000 LPH of water at ambient temperature.</p> <p>0.1 to 750 Nm³/hr of air at NTP.</p> <p>+2% of FSD</p>

143	Magnetic flow meter	10	Flow meters / Instruments	full power 12 - 25 Vdc, 250 mA low power 12 - 25 Vdc, 40 mA average with 250 mA peaks flow rate 0.28 - 20 ft/sec (0.08 - 6.09 m/sec)
144	Vortex flow meter	11	Flow meters / Instruments	High Accuracy : ±0.75% of Reading (Liquid) (±0.5% of Reading : Typical Accuracy/ Non-Guaranteed) ±1% of Reading (Gas, Steam) Wide Process Temperature Range : High temperature version up to 450°C Cryogenic version minimum –196°C
145	Flow control loop set with flow controller recorder,D.P. transmitter, receiver, unit control valve and impulse line, computer complete experimental set- up for flow measurement	12	Flow meters / Instruments	set with flow controller recorder,D.P. transmitter, receiver, unit control valve and impulse line, computer complete experimental set- up for flow measurement
146	. Experimental closed loop set up for solid flow measurement and Control with storage vessel, hopper, solid flow sensor, controller, Recorder and final control element	13	Flow meters / Instruments	closed loop set up for solid flow measurement and Control with storage vessel, hopper, solid flow sensor, controller, Recorder and final control element
147	Coriolis mass flow meter	14	Flow meters / Instruments	flame-proof type converter case ,Wide temperature range -200 deg C to 350 deg C,High accuracy and high stability over a wide range
148	Flow nozzle	15	Flow meters / Instruments	NOZZLE MOUNTING TYPES - Flange Type Weld-in Type Holding Ring TypePRESSURE TAPS - 1D and 1/2D Tap, Throat Tap
149	Integrated direct level indicator trainer (Hook type, sight glass type, float type level indicator)	1	Level Instruments	Magnetic Level Indicator with integrated Radar Level Meter is designed based on proven bypass measurement technology
150	Static pressure and air purge type level indicator	2	Level Instruments	It can be used with high viscous liquids 4-20mA output on each site remote displays, measuring range 0-10m. accuracy ±0.05 of span. Power supply 24V+/2V DC for SLA 1000 power consumption approx 1W output, signal 4-20mA DC load resistance 800Ω max. for 1000SLA amplification 1-5 times, working temp. 0°C to 50°C. materials casting – C.S plate for SLA1000, house nipple Brass power pressure supply 195-295kPa. Air source to sensor 0.3-1,/min. variable over pressure 295kPa mounting, wall mounting/pole mounting
151	Level transmitter (inter face)(HART/Field bus/profibus compatible)	3	Level Instruments	output is an analog current signal (transmitter) such as 4-20 mA. The output is an audible alarm or visual indicator.
152	Level control set up with level transmitters level recorder Controller & control valve complete Experimental set up or level simulator	4	Level Instruments	set up with level transmitters level recorder Controller & control valve complete Experimental set up or level simulator,
153	Level measurement equipments for solid, sonic solid level, microwave, capacitance probes, diaphragm switches, nuclear gauge, sonic and microwave solid level detectors point level detector, conductivity type	5	Level Instruments	solid, sonic solid level, microwave, capacitance probes, diaphragm switches, nuclear gauge, sonic and microwave solid level detectors point level detector, conductivity type
154	Mercury in glass thermometer (various ranges)	1	Temperature Instruments	graduated sealed glass capillary tube marked in degrees Celsius or Fahrenheit
155	Alcohol or other liquid in glass thermometers (consumable item)	2	Temperature Instruments	(consumable item)
156	Stem and dial type bimetallic thermometer(various ranges)	3	Temperature Instruments	Stem Length (In.) 36, Temp. Range (F) 0 Degrees to 200 Degrees , Dial Size (In.) 3, Stem Dia. 1/4", Connection Size 1/2" NPT, Full Scale Accuracy (%) +/-1, Case Hermetically Sealed, Case Material Stainless Steel, Stem Material
157	Mercury in steel remote indicating thermometers	4	Temperature Instruments	Dial Size : 100mm Dial : Tin / Aluminum with black marking on white dial. Range : -38~600°C Accuracy : +- 1% Full Scale. Case & Bezel : Stainless Steel or Drawn Steel; Stove enamelled black color.
158	Resistance bulb Wheatstone bridge type	5	Temperature Instruments	High accuracy 0.75% of liquid,1% of gas and steam
159	Thermocouple type pyrometer with millivoltmeter (with different types of thermocouples)	6	Temperature Instruments	Stem Length (In.) 36, Temp. Range (F) 0 Degrees to 200 Degrees , Dial Size (In.) 3, Stem Dia. 1/4", Connection Size 1/2" NPT, Full Scale Accuracy (%) +/-1, Case Hermetically Sealed, Case Material Stainless Steel, Stem Material
160	Optical pyrometer with all accessories	7	Temperature Instruments	Precise noncontact temperature measurement from -40 to 900°C Small infrared sensor with 22:1 optical resolution Rugged and usable up to 180°C ambient temperature without cooling Separate electronics with easy accessible programming keys and LCD backlit display Selectable analog output: 0/4-20mA, 0-5V, 0-10V, thermocouple type K or J
161	Radiation Pyrometer with all accessories	8	Temperature Instruments	Temperature Range -30 to 500 C,Response time -From 500 ms to 10 s,temperature unit in C,F or K.

162	Vapour pressure thermometer	9	Temperature Instruments	Non-ferrous ½" BSP (M) (Standard) Die Cast Aluminum, Weatherproof, Painted Stove Enameled Black with Screwed Inner Bezel of ABS Plastic.
163	Temperature transmitter, pneumatic	10	Temperature Instruments	The type of sensor input is user-selectable: thermocouples, RTDs, ohms, or DC millivolt.
164	Temperature transmitter electronic(input RTD ,TC)	11	Temperature Instruments	Effect of load ± 0.01 % of measuring span / 100 Ω Power supply effect ± 0.005 % of measuring span / V Warm-up time after approx. 5 minutes the instrument will function to the specified technical data (accuracy)
165	Experimental set up for measuring and controlling of temperature-Consisting of measuring, controlling, indicating, recording and final controlling elements, complete closed loop system with simulator	12	Temperature Instruments	Consisting of measuring, controlling, indicating, recording and final controlling elements, complete closed loop system with simulator
166	Digital temperature calibrator, mV/mA injector and measuring unit	13	Temperature Instruments	DC Current 0-20mA,DC Voltage 2-200nV,Transmitter Power Supply 24V DC,230V 10% AC single Phase (4dgt) LED
167	Pneumatic and electronic recorders (single point and multi point) both circular and strip chart types	1	Recorders	Recorder data format: circular, no. of plots: 4.00, data acquisition : Channels:4, different channels digital I/O channels 2, sampling freq. (kHz) resolution bits, accuracy (%FS) device type 0.1000, input specification: DC voltage: (0-150, 0-5)mV, Dc current 0-50mA, AV Volt AC current freq. inputs thermocouple input , RTD input, switch input (optional features), measurement range temp. (F) -400 – 3270, Strip chart recorder/potentiometer type specification, housing MS enclose with power coated, front door transparent acrylic sheet that contains screw terminal block. Consumption 25 to 50VA working condition temp -10°C to 50°C and 0-80% RH, No. of pen according to model, excitation voltage for transmitter 24V DC
168	Paperless LCD/LED recorder setup	2	Recorders	Display window: 320×240 high resolution chart color LCD. · Input accuracy: \pm (0.2%F.S+1) digit. · Input type: standard voltage: 0-5V, 1-5V. standard current: 0-10mA, 4-20mA,Transform output: 4-20mA (load <650 Ω), 1-5V 0-10mA (load <1000 Ω), 0-5V
169	PID controller trainer consisting of instrument panel, digital computer and interface system	1	Controllers	89C51RD2 Micro controller PC/AT Serial Port Visual Basic Interface Graph between Time and Temperature Store the Data in a file Front End Software WIN98/WINXP Current Temperature on a screen, Display the Equator
170	Real PID controller training kit	2	Controllers	89C51RD2 Micro controller PC/AT Serial Port Visual Basic Interface Graph between Time and Temperature Store the Data in a file Front End Software WIN98/WINXP Current Temperature on a screen, Display the Equator
171	With HART/Field bus devices, consisting operations of feed forward, cascade, ratio controlling	3	Controllers	device consist of feed forward, cascade, ratio controlling
172	Programmable logic controller (micro PLC) trainer	4	Controllers	PLC MAKE: Allen-bradley Pico / micro 810 / std. Equivalent. Micro810 Controller, 8IN 120/240VAC, 4RLY, AC PWR 8 Digital input / 4 Digital outputs 24VDC, 3A Power source. Size 4"X2"X2" I/p- O/p LED indication on front panel PC interface facility. PC-PLC interfacing cable1760-CBL-PM02 2080-USBADAPTER: USB Adapter Plug for Micro810 12-pt onlyVariable current or voltage input such as 0-10V, 4-20mA, etc.
173	HART/field bus communicator	5	Controllers	Large 5.7" VGA (640x480) color touch screen • Touch areas optimised for finger use (gloves/stylus) • Membrane keyboard as secondary way to use, IP65 casing • Drop / vibration tested,Up to 4 internal pressure modules (3 + B) in extended case
174	HART/Field devices (pressure/ flow/level)	6	Controllers	HART/Field devices (pressure/ flow/level)
175	Multifunction process control system consisting of level, flow , Temperature, pressure with remote set point control, ratio, cascade and feed forward with feedback loops with computer interface and software	7	Controllers	Multifunction process control system consisting of level, flow , Temperature, pressure with remote set point control, ratio, cascade and feed forward with feedback loops with computer interface and software
176	Electric actuators	1	Final Controlling Elements	Electric actuators have a high torque-to-weight ratio above 4,000 lbf.in. (450 Nm). Pneumatic actuators have an excellent torque-to-weight ratio below 4,000 lb
177	Pneumatic and hydraulic actuators	2	Final Controlling Elements	Electric actuators have a high torque-to-weight ratio above 4,000 lbf.in. (450 Nm). Pneumatic actuators have an excellent torque-to-weight ratio below 4,000 lb

178	Different type of control valves such as gate valves, globe valves, Ball valves, diaphragm valves, butterfly valves etc. eclectically actuated, pneumatic actuated and hydraulic actuated	3	Final Controlling Elements	Different type of control valves such as gate valves, globe valves, Ball valves, diaphragm valves, butterfly valves etc. eclectically actuated, pneumatic actuated and hydraulic actuated
179	Valve petitioners, booster relays, gland pickings etc.	4	Final Controlling Elements	Supply pressure Max. 1.0MPa Signal pressure Max. 0.7MPa Air consumption 10 L/min (ANR) or less (OUT: At 0.7MPa) Linearity Within $\pm 5\%$ Hysteresis Within 2% Cv factor 3 Ambient and fluid temperature -5 to 60°C (For general environments) -5 to 100°C (For high temperature environments) Port size Rc1/4(IN), Rc1(SUP,OUT)
180	Cut section models of various type of control valve	5	Final Controlling Elements	Features: * Compact Ergonomic Design. * User Friendly, Self Explanatory Systems. * Robust Construction. * Training Manual for Operation Ease. System Specifications: * Size of valves: 1" * Cut section of different type of valves such as, Ball Valve, Globe Valve, Gate Valve, Butterfly valve, Horizontal NRV, Vertical NRV, Needle Valve, Flow Control Valve, Globe Valve, Solenoid Valve, Pneumatic Diaphragm type Equal % Valve.
181	FIART/ field bus final control elements(two different type)	6	Final Controlling Elements	different types of control elements
182	Training kits or trainers as available on microprocessors applicable to process control and instrumentation and accessories	1	Equipment for Microprocessors	Different types of microprocessors on a single kit
183	Data acquisition system (DAS)	2	Equipment for Microprocessors	The number of analog signals that the DAQ product is able to digitize,The highest rate at which the input circuitry can digitize the analog signal.
184	ADC to DAC cards	3	Equipment for Microprocessors	8 analog I/O unbalanced 1/4" (AKM 4524) Dynamic Range (Input=100dB, Output=110dB) 64x Oversampling Input, 128x Oversampling Output SNR 90dB Input, 94dB Output +18dB Gain on Input 2 MIDI I/O, (16 channel each) 2 XLR Microphone Inputs with Phantom Power, Gain control
185	Digital I/O cards	4	Equipment for Microprocessors	PCB Dimensions 100mm (3.9370") Height X 160mm (6.2992") Depth X 1.6mm (0.0629") Thickness Form Factor Plug in Eurocard, 3U Height, 8 HP Width (1 slot), IEEE (1101.1, 101.10 and P1101.11) Rear Connectors Metric 2.0mm grid, female connector type A is used for J1 (cPCI BUS) and J2 (Signal distribution). Front Panel 128.5mm Height X 20.32mm Depth X 2.5 mm Thickness. Weight 200 g (0.44 lb) Operating Temperature 0 to 70°C Storage -40 to +85°C
186	Computers (latest configuration) with tables(For operating various control system trainers)	1	Computer and software	Processor - dual core 2.4 GHz+ (i5 or i7 series Intel processor or equivalent AMD) RAM - 8 GB Hard Drive - 128 GB or larger solid state hard drive Graphics Card - any with DVI support - desktop only Wireless (for laptops) - 802.11ac (WPA2 support required) Monitor - 23" widescreen LCD with DVI support - desktop only
187	Lap top (for convenient to field bus system/control system)	2	Computer and software	Processor : Intel Core i7-4510U RAM : 8GB Inbuilt HDD : 1TB OS : Windows 8.1
188	Licensed operating system (latest version)	3	Computer and software	Windows 8.1
189	Latest Office (licensed version)	4	Computer and software	MS Office 2013
190	LCD multimedia projector with trolley	5	Computer and software	Type: Manual: Zoom/Focus, F-number: 1.7 - 2.3, f-number 28 - 37mm, Zoom ratio: 1.0-1.35,projected distance 30" to 300": (0.8m to 11.m)with trolley
191	Broad band internet connection	6	Computer and software	High speed Internet connectivity (upto 24 Mbps)
192	Printer (Scan/copy)	7	Computer and software	Print quality black (best): Up to 600 x 600 dpi Duty cycle (monthly, A4): Up to 5000 pages Print technology: Monochrome Laser Display: 2-in LCD, text Processor speed: 230 MHz Number of print cartridges: 1 (black) Print languages: Host-based Memory, standard: 32 MB Memory, maximum: 32 MB
193	Networking tool kit	8	Computer and software	1x Crimp tool for 6P/8P plugs 1x Cable cutter Cable tester for RJ45 (EIA/TIA 568A/568B), 10BaseT, Token Ring, RJ11/12 USOC, and Coaxial BNC cables 1x Punch-down tool for 110 type terminal blocks

194	Hydraulic trainer	1	Equipment on Hydraulics and pneumatics	<p>Hydraulic Trainer is a self contained where demonstration of over 15 experiments is possible. Hydraulic Trainer is a sophisticated, indigenous, new generation hydraulic teaching aid, specially developed to impart the best practical training in basic hydraulics. It can be used as a Live Demonstrator to show functioning of various hydraulic components and control circuits. Operating pressure is kept at 20 bar for safety of the students. The components / equipments are mounted on an ergonomically designed mobile metal trolley with drip tray. The power pack is mounted at the bottom. The components are permanently mounted on the working area. Quick Release Couplings are used on the components and hoses for fast and easy connections. All the components are duly fitted with Quick Adapters and the hoses are fitted with quick couplers. Mounted on caster wheels for portability.</p> <p>Quick connections. Double shut off couplings for building circuits without any tools.</p> <p>Special sub plates for all components for front connection. Enabling observation of circuits and ease of Understanding of role of each components in circuits.</p> <p>Loading arrangement to cylinder gives added value to the equipment.</p>
195	Pneumatic trainer	2	Equipment on Hydraulics and pneumatics	<p>Basic Training Package includes:</p> <ul style="list-style-type: none"> • Cylinders, Solenoid Operated Directional Control Valves • Relays, Switches, Indicator /Electrical Distribution box • Limit Switches and Reed Switches with Cylinder Mounting • Pneumatic Manifold and Filter Regulator • Pneumatic Tubing and Storage Tray • 24V DC Power Supply and Electrical Connection Cords • Basic Electro-Pneumatics Workbook and Textbook • Tabletop Component Profile Plate <p>Advanced Pneumatics Training Package (Note: Does not include tabletop mounting board)</p> <p>Basic Pneumatics Training Package</p> <p>Optional Accessories: Create an Effective Learning Environment, Note: The Advanced Pneumatics Training Package is intended as an extension to the Basic Training Package. FluidStudio Pneumatic Training Software</p> <p>All components Training Package includes:</p> <ul style="list-style-type: none"> • Time Delay Relays and Counter • Inductive, Optical and Inductive Sensors • Emergency Stop Switch • Pneumatic Tubing and Storage Tray • Advanced Electro-Pneumatics Workbook <p>Basic Electro-Pneumatics Training Package with Accessories : Create an Effective Learning Environment</p> <p>Note: The Advanced Pneumatics Training Package is intended as an extension to the Basic Training Package.</p> <p>FluidStudio Pneumatic Training Software FluidSIM Pneumatic Resource Software</p>
196	Conductivity meter	1	Analytical equipments	
197	pH meter	2	Analytical equipments	<p>PH: pen type – waterproof</p> <p>Range: 0.00 to 14.00 PH. / -5 C to 80 C (23 F to 176 F).Packaging details: Plastic carry case along with user's manual, Other Specifications:- A. T. C. Automatic cal LCD with two displays & bar graph indicator.Data hold, 100 point data logger</p> <p>With complete kit</p>
198	Experimental set up for online conductivity measurement	3	Analytical equipments	as per requirement
199	Experimental set up for online pH measurement	4	Analytical equipments	<p>Specifications: Range: (pH) -2.00 to 16.00 pH; -2.000 to 16.000,Range: (mV) ±999.9 mV ; ±2000 mV</p> <p>Range: (Temp) -9.9 to 120.0°C; Resolution: (pH) 0.01 pH; 0.001 pH, Resolution: (mV) 0.1 mV; 1 mV</p> <p>Resolution: (Temp) 0.1°C, Accuracy (@20°C): (pH) ±0.01 pH; ±0.002 pH, Accuracy (@20°C): (mV) ±0.5 mV (±999.9 mV); ±1 mV (±2000 mV), Accuracy (@20°C): (Temp) ±0.4 °C (0.0 – 100.0 °C); ±1 °C (outside) (excluding probe error)</p> <p>pH Calibration: automatic, 1 or 2 points with 5 automatically recognized buffers (pH 4.01, 6.86, 7.01, 9.18, 10.01)</p> <p>Temp Compensation: automatic (with HI 7669/2W probe) or manual from - 9.9 to 120°C, pH Electrode: (included) HI 1131B, glass-body, single junction, refillable, BNC connector, 1m cable, Temperature Probe: (included) HI 7669/2W with 1 m cable (included) Input Impedance: 1012 Ohm , PC Connection: RS-232 serial port. Power Supply: (included) 12 Vdc adapter Environment: 0 to 50°C (32 to 122°F); RH max 95%</p> <p>Product Contents:pH is supplied with pH electrode, temperature probe, HI 76404N electrode holder, pH 4.01 & 7.01 buffer solutions (20 mL each), HI 7071S electrolyte solution, power adapter and instructions.</p>
200	Experimental set up for online dissolved oxygen measurement	5	Analytical equipments	<p>Resolution with 1302 electrode 0.1% of full scale</p> <p>Logging Capacity 2000 readings</p> <p>Off-line data storage 4 hours at 1/sec reading</p>
201	Work benches (1800 x 900 x 900 mm)	1	Furniture	1800 x 900 x 900 cm with 4 vices 12cm Jaw
202	Instrument test bench with cup boards	2	Furniture	Power Requirement 230 V Single phase 50 Hz. 1.5 KW
203	Steel cup boards with eight lockers for trainees (100x1200x450 mm)	3	Furniture	As per IS:3312-1984 made of M.S. sheet 16 SWG as per IS: 1730-1990 "O" grade , Approx. weight 100 kg,8 compartment adjustable type , super quality handle , lock & key etc.size L x W x D 100mm x 1200 mm x 450mm

204	Steel cup boards/ almirah 1800x1200x450(with five shelves)	5	Furniture	As per IS:3312-1984 made of M.S. sheet 16 SWG as per IS: 1730-1990 "O" grade , Approx. weight 100 kg,five compartment adjustable type , super quality handle , lock & key etc.size L x W x D 1800mm x 1200 mm x 450mm
205	Steel cup boards with eight lockers for trainees (1800x1200x450mm)	6	Furniture	As per IS:3312-1984 made of M.S. sheet 16 SWG as per IS: 1730-1990 "O" grade , Approx. weight 100 kg,8 compartment adjustable type , super quality handle , lock & key etc.size L x W x D 1800mm x 1200 mm x 450mm