SR	DESCRIPTION OF EQUIPMENT	DEMA	NDED
NO	(TECHNICAL DETAILS)	Q ⁻	ΓΥ
1	2	3	
1	Drone	1	no
	Djl Phantom 4 Pro Intermediate		
	Drone		
	- The DJL Phantom 4		
	Professional with,New Features		
	- Improved Obstacle Avoidance		
	System Ptrevents Crashes		
	- Improved 30 Minute Flight, and Flight		
	Range 4.3 Miles(7KM)		
	- New intellgent Flight Modes		
	For Flexibility + Variety		
	- New Camera Shoots 4K UHD		
2	High Definition Core Aligning fusion Splicer TYPE -82 C	1	no
3	Cisco Server UCSC C220 M5SX Rack Server	1	Set
	32 GB DDR 4nos, 1.2TB HD 2nos,		
	SNTC 8X5XNBD UCS C220 M5 SFF 10 HD w/o CPU, mem, HD, PCIe, P		
	Cisco UCS 770W AC Power Supply for Rack Server Friction Rail Kit for		
	C220 M4 and M5 rack servers C220 M5 Security Bezel 2.2 GHz 4114/85W		
	10C/13.75MB Cache/DDR4 2400MHz Cisco 12G Modular RAID controller		
	with 2GB cache Intel X710-DA2 dual-port 10G SFP+ NIC		
4	Cisco Router	1	set
	ISR4431/K9 Cisco ISR 4431 (4GE,3NIM,8G FLASH,4G DRAM,IPB) CON-SNT-		
	ISR4431K SNTC-8X5XNBD Cisco ISR 4431 (4GE,		
5	MaxTester 730C PON/METRO OTDR	1	set
	EXFO (Canada Brand) OTDR		
	Model No: MAX-720C-SMI-XX		

SR	DESCRIPTION OF EQUIPMENT	DEMANDED	
NO	(TECHNICAL DETAILS)	Q ⁻	ΓΥ
1	2	3	
6	POE Switch with 10G Uplink	1	set
	C9200L-24P-4X-E		
	C9200L-DNA-E-24-3Y		
	CON-SNT-C920024X		
7	Cisco Wireless Controller	1	set
	AIR-CT3504-K9		
	Cisco 3504 Wireless Controller LIC-CT3504-1A		
	Cisco 3504 Wireless Controller 1 AP Adder License CON-ECMU-LICCTCTA		
	SWSS UPGRADES Cisco 3504 Wireless Controller 1 AP Adde		
8	Cisco Wireless Acess Point	6	Nos
	AIR-AP2802I-S-K9		
	802.11ac W2 AP w/CA; 4x4:3; Int Ant; 2xGbE S Domain		
	CON-SNT-ARAPSIK9		
	SNTC-8X5XNBD 802.11ac W2 AP w/CA; 3x4:3; Int Ant; 2xG		
9	Omron Collaborative Robot	1	nos
	Including vision System		
	- model-TM5-700		
	-Omron Robot Stand		
	- Gripper for Omron Robot		
10	TDSMGT Mechatronics Training kit with IOT system	2	no
	- Includinh Cp1L PLC 40 IO Training kit		
	Brand- TDSMGT		
	Model- MIM-1620 TDSMGT IIOT		
11	ABB Robot Vision System	2	nos
	-ABB Smart camera		
	-Camera firmware: Required 4.08(22), Recommended 4.10.2 (DSQC1020,		
	DSQC1021 and In-Sight Micro 1402) or 4.9.4 (AE3 YuMi Smart Gripper)		
	- Related compatible peripherals.		

SR	DESCRIPTION OF EQUIPMENT	DEMA	NDED
NO	(TECHNICAL DETAILS)	Q ⁻	ΓΥ
1	2	3	
12	Light Meter	2	nos
	-Wide range to 40,000Fc or 400,000 Lux with max resolution to 0.01		
	Fc/Lux		
	-Relative mode indicates change in light levels, peak mode captures		
	highest reading		
	-Remote light sensor on 12" (30.5cm) coiled cable - expandable to 24"		
	(61cm)		
	-Utilizes precision photo diode and color correction filter		
	-Large LCD display with analog bargraph		
	-Backlight for readings in low light levels		
	-Complete with 9V battery, light sensor with protective cover, protective		
	holster. and soft case		
13	FAS-230 Linear Transfer for 4 Stations	1	nos
14	- Linear transfer for 4 stations Modern Control Systems Trainer	1	nos
	- Microprocessor		
	- DC Servo System		
	- Pump systems		
	- Sensors		
	- compatible Software package		
15	SIF-401 Station with Energy Data Reception (EDR) and WIFI AP	1	no
	- The Containers are place on the pallet by means of electronic		
	actuators and agravity positioner . All pallets include an		
	RFID tag that allows for their identification and traceability throughout		
	the system.		

SR	DESCRIPTION OF EQUIPMENT	DEMANDED	
NO	(TECHNICAL DETAILS)	QTY	
1	2	3	
16	SIF-402 Container Filling (Solid)	1	no
	- The raw matetial can be of three different colours(red,blue and		
	yellow)and can be supplied independently or mixed,in different		
	doses.Once the containers are filled,the amount of material introduced		
	into the container is checked.		
17	SIF-405 Capping System	1	no
	- The caps are stored in two interchangeable feeders,for circular and		
	square section caps.A pneumatic part type detection system recognized		
	what type of cap is in each feeder. The number of parts		
	in each feeder is know in real time, detecting if either feeder is empty.		
	A machine vision camera verifies that the cap has been fitted in the		
18	SIF-406 Container Warehouse	1	no
	- This sation acts as a warehouse for finished or semi-finished		
	products.It can store 50 containers and their corresponding pallets.		
	The warehouse allows the containers to be introduced,extracted and		
	moved internally according to the needs of the process.		
19	SIF-407 Container Labelling and Dispatching	1	no
	- First of all it prints QR labels that are stuck on the containers. A		
	machine vision systems inspects the code to link it to the RFID of the		
	corresponding pallet and ensure the correct placement of the label.		
	Additionally, the station dispatches the correctly finished containers for		
	unit product orders.		
20	FAS-220 Pallet Transfer Station	1	nos
	with Siemens PLC		
	- This station transfers the pallet with the work -piece from one transfer		
	to another in a parallel configuration. The trobleshooting simulation		
	system TROUB-200 is included, which generates up to 16 different		
	breakdowns to be diagnosed by the user.		

SR	DESCRIPTION OF EQUIPMENT	DEMA	NDED
NO	(TECHNICAL DETAILS)	Q ⁻	ΓΥ
1	2	3	
21	FAS-216 Storage Station with	1	no
	Siemens PLC		
	- PLC Siemens S7-1200		
	- TURBO-200 Simulation System(Simulation System)		
22	Electrical Machine Trainer	1	nos
	- For this purpose the winding endsare connected to 4mm safety		
	socket in a metal housing on top of which a clear synoptic diagram is		
	engraved as an educational terminal board,The student can easily		
	understand operation and winding connection .Also most of the		
	accessories and instruments designed in panel System A4is high in		
	standard.The machines power is approximately a maximum of 400W,as		
	the supply requirement for the system operation requires		
23	Industrial Grade rexroth hydraulic Training System	1	nos
24	NI Power Electronics Training System	2	nos
	- NI Elvis Main Board		
	- NI Multisim		
	- Power Electronics Training Board		
	- Energy System Board		
25	NI Vision System	2	nos
	- Image Acquisition		
	- Machine Vision & Automation		
	- Scientific Imaging		

SR	DESCRIPTION OF EQUIPMENT	DEMANDED	
NO	(TECHNICAL DETAILS)	QTY	
1	2	3	
26	Omron Industrial Electronic and Electrical Trainer with Training Desk	1	nos
	Details Omron Product Part		
	- Omron Inductive Proximity Board (E2E- X5E1 NPN No)		
	- Inductive Proximity Bard(E2E-X10ME1		
	NPN No)		
	- Omron Capactive Proximity Board (E2K- X8ME1 NPN No		
	- Liquid Level Sensor Board(E2K-L13MC1		
	- Omron Photoelectric Sensor Board (Through- beam)(E3z-T61 NPN)		
27	Omron Servo 1 Training kit Package with Omron PLC& Touch Screen	2	nos
28	Spectrum Analyzer, 3 GHz	1	no
	N9320B-AMA		
	AM/FM demodulaton metrics		
20	N9320B-DMA ASK/FSK Demodulator metrics	1	no
29	RF Signal Generator 9kHz to 3 GHz	1	no
30	Real-time Spectrum Analyzer, 9 kHz to 3.0 GHz	1	no
31	RF Demo Kit (Transmitter) for Spectrum Analyzer	2	no
32	RF Demo Kit (Receiver) for Spectrum Analyzer	2	no
52	The morning to Spectrum Amary201		110
33	Analog Signal Generator 9 kHz to 4 GHz	1	no
34	Network Analyzer 300 kHz to 1.3 GHz	1	no
35	Modern Control Systems Trainer	1	no
36	Oscilloscope BW-100MHz, 2+1 (external)channels, 1GS/s, 12bits vertical	4	nos
	resolution, 55000 wfms/s, 20M record length, USB, LAN		
37	Digital Signal Processing Training Kit (with DE2-115)[2] + Teaching	1	no
	Slides + Lab Sheet		

SR	DESCRIPTION OF EQUIPMENT	DEMA	NDED
NO	(TECHNICAL DETAILS)	QTY	
1	2	3	
38	Electromagnetic Theory Training Kit	1	no
39	Mobile Communications + Training Kit + Teaching Slides + Lab Sheet	1	no
40	RF Principles and Measurement	1	no
	Training Kit + Teaching Slides + Lab Sheet		
41	Digital RF Communications	1	no
	Training Kit + Teaching Slides + Lab Sheet		
42	Digital Modulation Techniqus	1	no
	Training Kit + Teaching Slides + Lab Sheet		
43	Antenna and Propagation	1	no
	Training Kit + Teaching Slides + Lab Sheet		
44	RF Circuit Design	1	no
	Training Kit + Teaching Slides + Lab Sheet		
45	Electronic Instrumentation and Measurement + Training Kit + Teaching	1	no
	Slides + Lab Sheet		
46	Optical Time-Domain Reflectometer(OTDR)Single	1	no
	mode:1310nm/1550nm/1625nm		
	Dynamic Range: 37/35/35dB		
	Including Launch Cable & Optical Cleaning kit		
47	Optical Fiber Fusion Splicer	1	no
48	Optical Multimeter	1	no

SR	DESCRIPTION OF EQUIPMENT	DEMA	NDED
NO	(TECHNICAL DETAILS)	QTY	
1	2	3	
49	RF Power/Peak Power Meter	1	no
	RF power 10KHz to 40GHz;		
	RF Voltage 10Hz to 2.5GHz,		
	Dual channel		
	Peak Power Sensor		
	50/500MHz to 18GHz,		
	-24dBm to +20dBm		
	CW power sensor		
	Average diode power sensor, 500KHz to 18GHz, -70 to +20dBm		
	RF Voltage Probe Kit 10 KHz to 1.2Ghz, dynamic range of 200uV to 10V		
50	RF Power Meter	1	no
	10Khz to 100GHz, Dual channel Power Sensor Average Diode Power		
	Sensor, 10KHz to 8GHz, -60 to +20dBm		

SR	DESCRIPTION OF EQUIPMENT	DEMANDED	
NO	(TECHNICAL DETAILS)	Q	ГΥ
1	2	3	
51	Modern control system trainer (KALF01)	1	nos
	Microprocessor: Processor		
	DC Servo : At 12V		
	No-load speed:200rpm		
	No- load current:0.15A		
	Stall current:5.5A		
	Stall troque:21 kg-cm		
	Max output power: 10 W		
	Pump : Motor voltage: 12VDC		
	Motor current: 200.300mA		
	Flow rate:up to 100mL/min		
	Flow sensor : Hall Effect,Pulse output		
	Distance Sensor: Resolution: 1mm		
	Maximum rage: 400 cm		
	Minimum rage : 4 cm		
	Interface: PC communication		
52	Eisco Labs Demonstration	5	nos
	Motor Generator Activity		
	Model (AC/DC) - Hand Powered		
	Pard Number : PH1245N8		
	Number of Items : 1		
	EAN: 0849230054090		

SR	DESCRIPTION OF EQUIPMENT	DEMA	NDED
NO	(TECHNICAL DETAILS)	Q.	ГΥ
1	2	3	
53	Ohm's Law Appratus, For	5	nos
	Laboratory		
	Specification;		
	- Output waveforms:Sine,Square and Traingle		
	TTL/CMOS		
	-Frequency:0.1Hz to 2 Mhz		
	- Amplitude: 20 VP-P		
	- Impedance: 50 Ohm		
	-Attenuation : 20 dB,40 dB		
	DC offset:+-10V	_	
54	function generators/counter	3	nos
55	Oscilloscopes (Digital)	3	nos
56	high performance DC power supply	3	nos
57	three-phase autotransformers	3	nos
58 59	power electronics converters isolators	3	nos
60	power meters	3	nos
61	multiple combinations of switches	3	nos
62	different types of electrical Loads	3	nos
63	Omron Industrial Electronic and Electrical Trainer with Training Desk	1	no
	Details Omron Product Part		
	- Omron Inductive Proximity Board (E2E-X5E1 NPN No)		
	- Inductive Proximity Bard(E2E-X10ME1		
	NPN No)		
	- Omron Capactive Proximity Board (E2K- X8ME1 NPN No		
	- Liquid Level Sensor Board(E2K-L13MC1		
	Owner Black starting Common Board (Thursday In com) (F2- TC1 NBN)		

SR	DESCRIPTION OF EQUIPMENT	DEMA	NDED
NO	(TECHNICAL DETAILS)	Q ⁻	ГΥ
1	2	3	
64	Omron Vision Sensor (FQ2) Training Kit	3	no
	Details Product Parts		
	- Vision Sensor Omron (FQ2-S200050F)		
	-Touch Finder Omron (FQ2-D30)		
	- FQ Ethernet Cables(FQ-WN002)		
	- I/O Cables (FQ-WD002)		
	- Power Supply for Sensor (S8VK-G06024)		
	- Fiber Obtic Amplifier (E3X-HD6)		
	- Fiber Obtic Connector(E3X-CN11 OMS)		
	-Fiber Obtic Cable (E32-DC200E 2M)		
	- Training Kit		
65	Omron Safety Sensor (F3SJ) Training Kit	2	no
	Details Product Parts		
	- Omron Safety Light Curtain (F3SJ-BO305P25		
	- Cable for simple wiring (F39-JDO303BA)		
	- Relays with Forcibly Guide Contacts(G7SA- 3A1B DC24)		
	- Power Supply (S8VK-Go6024)		
	- Safety Training Kit		
	- Set of Safety Cable 4mm.(10Pcs)		
66	NS5 Omron HMI Training Kit	3	no
	- Omron Programmable Terminal		
	- Omron Touch Screen NS5 Series		
	- Operate a screeen size 5.7 inches		
	- Power Supply Voltage Output 24VDC		
	- Switch ON/OFF 220VAC		
	- OMRON NS Operation Manual		
	- USB Connecting PC with PT		
	-RS232C Cable connecting PLC with PT		

SR	DESCRIPTION OF EQUIPMENT	DEMA	NDED
NO	(TECHNICAL DETAILS)	Q	ΓΥ
1	2	3	
67	Analogue Component Trainer	4	nos
	Specification:		
	-Trainer comprises of Power supplies on boards 0-12V,250 mA and 0-		
	5V,250mA Variable		
	- +12V/150mA and +5V/150mA Fixed Supplies		
	Provided on board/On board bread board		
	provied-AC power supply 15-0-15V for rectifier application-		
	Traineroperated on 230V		
	50Hz+10%		
	-Dimensions of the Trainer will be 12''x10'' with Plastic Box Highly shock		
	proof(India)		
68	Discrete Component Trainer	4	nos
	Specification:		
	Trainer comprises of Power Supplies inside the trainerPower supplies		
	on boards 0-2V,250mA and 0- 5V,250mA Variable - +12V/150mA and		
	+5V/150mA Fixed Supplies Provided on board.8Nos of Variable resistor		
	provided on the board. AC power supply 15-0-15V for rectifier		
	annication (India)		
69	Electrical & Electronic System Trainer	4	nos
	Built in Power Supply:DC Supply :5V/ 1A.& ± 12V, 500mA.0 to 15V		
	DC(Variable),100mA(Isolated)0 to 30 V DC(Variable),100mA(isolated)		
	Hight Volt DC-15V to 220V,100mA,AC Supply:12-0-12V AC,150mA. Short		
	circuit protected.		

SR	DESCRIPTION OF EQUIPMENT	DEMA	NDED
NO	(TECHNICAL DETAILS)	Q ⁻	ΓΥ
1	2	3	
70	Balance (4 digits), Japan, Shimadzu	2	no
	Max Capacity: 220g		
	Minimum display: 0.1 mg (4 Digit)		
	Pan Size (dia): Ø 91 mm		
	Power requirement: 12 V, 1 A approx.		
	Weight (kg) approx: 6.2		
	Main Body Dimension:213(W)×356(D)× 338 (H)		
71	Water Bath (UK, MRC LAB)	2	no
	Capacity: 6L Temp: up to 85°C		
	Exterior Dimension (W×d×h): (28.8×30.5×22.9 cm)		
	Bath Tank Dimension: (29.8×15.2×15.2)		
	Tank Capacity: 7L		
	Stainless steel Gable cover one included		
72	DO Meter (UK, DO-5512SD MRC Lab)	2	no
	Dissolved Oxygen meter data logger real time data logger, save the		
	data. Lie SO memory card and can be down load to the excel, extra		
	software is no need.Dissolved Oxygen range: 0 to 20 mg/L Auto temp.		
	compensation, Auto Calibration. % salt and height value compensation		
73	adj. Computer Controlled Heat Transfer Sanisa Unit /HT10VC A Volume	1	No
13	Computer Controlled Heat Transfer Service Unit (HT10XC-A, Volume 0.05 m3, Gross weight 15kg)	1	INO
74	Unsteady state heat transfer (HT17-A) Volume: 0.17m3	1	No
	Gross Weight:14kg	-	
	UNSTEADY STATE HEAT TRANSFFR-HT17		
	-A small scale accessory designed to enable		
	exercises to be performed in unsteady state		
	heat transfer.		
	- Comprises an electrically heated water		
	bath,variable speed recirculation pump,a		

SR	DESCRIPTION OF EQUIPMENT	DEMA	NDED
NO	(TECHNICAL DETAILS)	Q	ΓΥ
1	2	3	
75	Thermo-electric heat pump (HT18CA)	1	No
	Volume: 0.07m3		
	Gross Weight:15kg		
	THERMO-ELECTRIC HEAT PUMP-HT18C		
	- Small scale accessory designed to demonstrate the use of a Peltier		
	device to		
	transfer heat across surfaces		
	- Comprises a Peltier device,a heater,and		
	a water-colled heat exchanger.		
76	Free and forced convection (HT19-A)	1	No
	Volume: 0.1m3		
	Gross Weight:12kg		
	- A bench mounted unit specifically designed		
	to demonstrate the phenomena of free and		
	forced convection and to measure tempera-		
	ture profiles from three different heart trans- fer surfaces.		
	- Comprises of a vertical air duct,with a		
	transparent front for visibility mounted on		
	a fan at the base of the duct,three heat		
	transfer surfaces,airflow,and temperature		
77	Temperature measurement and calibration	1	No
	(TH1-A)		
	Volume: 0.2m3		
	Gross Weight:15kg		
	- A bench top unit comprising a hypsometer/hot water bath and ice		
	flask,which generate accurate fixed points and variable temperature. An		
	accurate platinum resistance thermometer(PYY100)with five point		
	NAMAS calibration certificate and temperature indicated directly in C is		

SR	DESCRIPTION OF EQUIPMENT D		NDED
NO	(TECHNICAL DETAILS)	(TECHNICAL DETAILS) QTY	
1	2		3
78	Pressure measurement and calibration	1	No
	(TH2-A)		
	Volume: 0.1m3		
	Gross Weight: 15kg		
	- A bench top unit comprising a simple Desdweight Pressure Calibrator		
	with weights to generate a range of predetermined pressures. This is		
	connected to a Bourdon guage and electronic pressure sensor. The		
	Bourdon gauge incorparates an arbitrary		
	scale and a clear acrylic front face enables observation of the Bourdon		
	tube and the operation mechanism.A reservoir with isolating valve		
	enables the calibrator,Bourdon gauge and pressure sensor to be easily		
	primed.		
79	Saturation pressure and throlling calorimeter (TH3-A)	1	No
	Volume: 0.26m3		
	Gross Weight:30kg		
	- A bench top unit comprising a boiler vessel and pipe loop with a		
	pressure relief valve to limit the operating pressure to eight bar. A sight		
	glass on the front of the boiler enables the boiling patterns to be		
	observed and a Bourdon type guage indicates the pressure in the		
80	Expansion processes of a perfect gas	1	No
	(TH5-A)		
	Volume: 0.34m3		
	Gross Weight:22kg		
	- A small-scale unit designed to introsuce Students to the properties of		
	a perfect gas using air to demonstrate basic thermodynamic processes.		

SR	DESCRIPTION OF EQUIPMENT	DEMA	NDED
NO	(TECHNICAL DETAILS)	Q ⁻	ΓΥ
1	2	3	3
81	Modern control system trainer	1	No
	Microprocessor: Processor		
	DC Servo : At 12V		
	No-load speed:200rpm		
	No- load current:0.15A		
	Stall current:5.5A		
	Stall troque:21 kg-cm		
	Max output power: 10 W		
	Helical Pinion		
	50:1 metol gearbox		
	Pump : Motor voltage: 12VDC		
	Motor current: 200.300mA		
	Flow rate up to 100ml /min		