

Annexure 1

Package 1

Sl.No	Category	Name	Description	Brand	Quantity
1	Electronics Development	Arduino UNO or compatible Microprocessor and microcontroller	Hardware development board with Memory and IO ports	Arduino	30
2	Electronics Development	Arduino Nano	-	Arduino	5
3	Electronics Development	RASPBERRY PI 3	RASPBERRY PI 3 MODEL B	Raspberry Pi	5
4	Electronics Development	Breadboards & Mini Breadboard	Solder less 400 pin breadboard	White Label	20
			Solder less 800 pin breadboard	Nickel	10
			Self-Adhesive Proto Shield	White Label	10
5	Electronics Development	General Purpose solder able Board	FR2 A Grade Material (140 x 90 mm)	White Label	20
			FR2 A Grade Material (80 x 55 mm)	White Label	20
			Female Berg Strip 40 pins Male Berg	White Label	20
			Strip 40 pins	White Label	20
6	Electronics Development	16x2 LCD display With I2C	Dot matrix LDC display with 16 characters x 2 lines	White Label	30
7	Electronics Development	USB Cables	USB Cable Set (A to B)	White Label	30
8	Electronics Development	9 Volt battery, multiple resistors and capacitors for electronic projects (various sizes)	Amperage, Range of Resistance, Capacity of Capacitor (30Kits)	Peak Power White Label White Label	30
9	Electronics Development	Linear Voltage Regulator	7805, 7812,7809	White Label	30
10	Electronics Development	Water Pump module	DC12V 3W Submersible Water Pump	White Label	1
11	Electronics Development	Piezoelectric Plate	Normal Copper based 4 cm Diameter approx.	White Label	20
12	Electronics Development	8*8 LED Matrix Module	Max7219 Dot LED Matrix Module Mcu Control LED Display Module	White Label	5
13	Electronics Development	Bluetooth	HC 05 Working voltage 5 Volt	White Label	10
14	Electronics Development	7 Segment Led Display	LED 4-Digit Display Module w/ Clock Point / 4-Pin Dupont Line for Arduino (20cm)	Catalex	4
15	Electronics Development	GSM	Sim800L GPRS Transfer Board Micro SimGsm Core Ttl Port Module for Arduino	Simbool	3
16	Electronics Development	GPS	GY-NEO6MV2 new GPS module	Blox	3
17	Electronics Development	Laser Diode	650Nm 6Mm 5V Dc 5Mw Mini Laser Dot Diode Module	White Label	10

18	Electronics Development	LDR Module	Photosensitive Ldr Light Sensor Module	Flying Fish	30
19	Electronics Development	Keypad	Universal 16 Key Switch Keypad	White Label	5
20	Electronics Development	Joy Stick	Joystick Module for Arduino	White Label	4
21	Electronics Development	Active Buzzer	small 5 volt	White Label	50
			Big 5 volt	White Label	30
22	Electronics Development	Motor driver	L293d	White Label	5
23	Electronics Development	Sound Playback Module	Voice Board Recording Recorder Playback Module on Board Microphone with Mic Sound Audio Loudspeaker	White Label	5
24	Electronics Development	BO Motors With Wheel	Side Shaft BO Motor	White Label	12
25	Electronics Development	Node MCU / Wemos D1	WIFI Internet Development Board Module Node MCU	White Label	5
26	Electronics Development	Vibrating Motor	Vibrating Motor	Star- VS Gold	30
27	Electronics Development	Alligator Connectors	Multi-Colour Alligator Connectors	Armstrong	100
28	Electronics Development	Battery clips with DC Jack	9 volt battery clips with DC Jack	White Label	20
29	Electronics Development	Hookup Wires	Red & Black set 100 Meters each	White Label	2
30	Electronics Development	Jumper Cable	Male-Male	White Label	600
			Male-Female	White Label	300
			Female-Female	White Label	150
31	Electronics Development	RGB LEDs	Regular 5mm 3-5 volt Range	White Label	100
32	Electronics Development	LEDs (Red)	Regular 5mm 3-5 volt Range	Everlight	500
33	Electronics Development	LEDs (Green)	Regular 5mm 3-5 volt Range	LED Zone	500
34	Electronics Development	LEDs (Blue)	Regular 5mm 3-5 volt Range	LED Zone	500
35	Electronics Development	Diode	Different Basic Diodes kit	White Label	2
36	Electronics Development	Push Button Switch	Tactile Switch Micro - Push to On Button	White Label	100
37	Electronics Development	555 timer IC	555 timer IC	White Label	50
38	Electronics Development	Atmega16u2	Individual IC (DIP)	White Label	5
39	Electronics Development	MPR121	Capacitate touch module	White Label	10
40	Electronics Development	Capacitate Touch Switch	Capacitate Touch Switch	White Label	5
41	Internet of Things & Sensors	IR Sensors, Obstacle avoider sensor	Detection range, detection angle	EdgeFX	10
42	Internet of Things & Sensors	Triple Axis Magnetometer	3-Axis Magneto resistive Sensors, I2C Digital Interface, Integrated 12-bit ADC, Range of -8 to +8 Gauss, 160 Hz Maximum Output Rate	White Label	5

43	Internet of Things & Sensors	Humidity Sensor	Operating range: 20 - 95 % RH, Temperature: 0 - 60 Celsius, Power supply: 1.5V AC(Max sine), Operating frequency: 500Hz - 2kHz	White Label	5
44	Internet of Things & Sensors	MQ Series	MQ-4 Methane Natural Gas Sensor	Flying Fish	2
			MQ-3 Alcohol - Ethanol Sensor	Flying Fish	2
			MQ-7 High Sensitivity CO Carbon Monoxide Sensor Detector	Flying Fish	2
			MQ - 2 Smoke Detection	Flying Fish	2
			MQ-135 Air Quality Sensor	Flying Fish	2
45	Internet of Things & Sensors	IR (transmitter) receiver -TSOP 1738	Switching rate – 38 KHz	White Label	5
46	Internet of Things & Sensors	Ultrasonic Sensor Module HC-SR-04 or compatible	Power supply, Quiescent current, Working current, Effectual angle, Ranging distance, Resolution, Working angle & dimension	White Label	30
47	Internet of Things & Sensors	Triple Axis accelerometer	3-axis sensing, Small, low profile package, 4 mm × 4 mm × 1.45 mm LFCSP, Low Power : 350 µA (typical), Single-supply operation: 1.8 V to 3.6 V, Temperature stability	White Label	5
48	Internet of Things & Sensors	PIR Motion Detector Module	High digital pulse when motion detected, Low digital pulse when idle /no motion detected, Sensitivity range (upto 6 m), Power supply: 5V – 12V	White Label	10
49	Internet of Things & Sensors	Pulse Rate Heart Sensor	Pulse Rate Sensor Finger Based wore on the finger or earlobe Working voltage 3-5V	White Label	2
50	Internet of Things & Sensors	Relay Module	5V 10A 2 Channel Relay Module	EdgeFX	10
51	Internet of Things & Sensors	Soil Moisture Sensor	Soil Moisture Detection Humidity Sensor Module	EdgeFX	3
52	Internet of Things & Sensors	Touch Sensor	Capacitive Touch Sensor Module	White Label	3
53	Internet of Things & Sensors	Metal touch sensor module		EdgeFX	3
54	Internet of Things & Sensors	Rain Drop Sensor	Rain Sensitive , Rain Drop Detection Sensor Module	EdgeFX	3
55	Internet of Things & Sensors	Flex Sensor	Flex Sensor 2.2 Inches	White Label	5
56	Internet of Things & Sensors	Temperature Sensor	Temperature Sensor Lm35	White Label	20
57	Internet of Things & Sensors	Force Pressure Sensor	Force sensitive resistor with a square, 1.75x1.5", sensing area	White Label	2
58	Internet of Things & Sensors	Colour Recognition Sensor	TCS3200 Color Recognition Sensor	White Label	2
59	Internet of Things & Sensors	Water Flow Sensor	Arduino Compatible	Sea	1

60	Internet of Things & Sensors	Sound Sensor	Sound Sensor Module, Microphones module	White Label	5
61	Internet of Things & Sensors	IR Sensors Array for Line Following	IR Sensors Array for Line Following	EdgeFX	5
62	Internet of Things & Sensors	10000 Mh 5 volt Power Bank	10000 Mh 5 volt Power Bank	Ambrance	5
63	Internet of Things & Sensors	RFID Reader – Tags	Current :13-26mA / DC 3.3V, Idle Current :10-13mA / DC 3.3V, Sleep Current<80uA, Peak Current<30mA, Operating Frequency: 13.56MHz<30mA, Read range between 20 cm to 1 m	White Label	3
64	Internet of Things & Sensors	RF Modules Tx& Rx 315 MHz ASK	Frequency Range: 433.92/315 MHz, Supply Voltage: 3 – 6 V, Output Power : 4 – 16 Dbm, Low power consumption, Easy application	White Label	5
65	Robotics	Stepper motor with Driver board	28BYJ-48 ULN2003 5V Stepper Motor + ULN2003 Driver Board	White Label	5
66	Robotics	DC motor	12V DC Gear 150 RPM	White Label	12
67	Robotics	Servo motors	Position Servo Angle based Metal Gear	Power Pro	4
			Small Servo Metal Gear	Power Pro	4
			Continuous Metal Gear Servo 360	Power Pro	4
			Small Servo Plastic Gear	Power Pro	30
68	Robotics	150 RPM BO Motor	150 RPM BO Motor	White Label	10
69	Robotics	L298P Motor Driver	L298P Motor Driver Shield or relative Driver Shield	White Label	5
70	Robotics	Servo Motor Tester	CCPM 3 channel Servo Tester	White Label	2
71	DIY Kit	Robotics DIY Kit	4 wheel robotic kit	EdgeFX-DIY TV Remote Robot kit	4
72	DIY Kit	Mechanical (Modular) Construction kit	Should be compatible with electronics	EdgeFX	4
73	DIY Kit	STEM learning/application Kit	Drone Kit	Toy House	1
			Aero Space	Scientific Explorer	1
			Automobile kit	EdgeFX	1
			Bio Medical Kit	EdgeFX	1
			Agri Tech Kit	EdgeFX	1
			Bio Tech	EdgeFX	1
			Water/Sanitation	EdgeFX	1
			Other Potential STEM Application Kit	EdgeFX	1
Package 2					
Sl.No	Category	Name	Description	Brand	Quantity

1	Rapid Prototyping Tools	3D Printer Kit and tools	FDM (Fused Deposition Modelling) Minimum Dimensions: 160mm*160mm*160mm Build Size or 4 litre build volume. Nozzel : 0.3 mm to 0.4mm nozzle diameter Slicing Software should be Free or Open Source LCD Screen UI that displays print metrics Good quality anti-bacterial fungal cover	Wanhao or DREMEL	1
2	Rapid Prototyping Tools	Dedicated UPS/Power back up with a 2 hour battery back up at least		White Label or Numeric	1
3	Rapid Prototyping Tools	Filament for 3D printer	Compatible 700/1000 Grams Filament	Wanhao or DREMEL	5
4	Rapid Prototyping Tools	Filament Storage Box		White Label	5
5	Rapid Prototyping Tools	Set of Arts & Crafts Accessories – eg- stationary items and basic prototyping material	Cardboard	White Label	5
			Foam core boards	White Label	5
			String (50m)	White Label	50
			Rubberband	White Label	100
			Popsicle sticks	White Label	100
		Wood glue	White Label	1	

Package 3

Sl.No	Category	Name	Description	Brand	Quantity
1	Mechanical Tools	Hacksaw	150mm Junior Hacksaw	Jolly	1
2	Mechanical Tools	Extra hacksaw blades		Jolly	10
3	Mechanical Tools	Pliers	External Straight	Mega	1
			Nose Circlip Plier	Mega	1
			Long Nose Plier	Freemans	1
			Combination Mini Plier	Freemans	1
			Wire stripping pliers	Freemans	1
			Bent nose plier	Taparia	1
		Needle nose pliers	Taparia	1	
4	Mechanical Tools	Mini Hack Saw	Mini 254mm Hacksaw	Classic	1
5	Mechanical Tools	Hacksaw blades Mini		Classic	10
6	Mechanical Tools	Ball Pein Hammer	Ball Pein Hammer	Freemans	1
7	Mechanical Tools	Steel Shaft Claw Hammer	Claw Hammer Steel Shaft	Freemans	1
8	Mechanical Tools	C-Clamp	Metal Clamp 3 " Inch size	Unique	4
9	Mechanical Tools	Allen Key Set	10 Piece Ring Imperial Allen Hex key	Stanley	1
11	Mechanical Tools	Workstation for drilling		Bosch	1
12	Mechanical Tools	Spanner Set	12 piece combination Spanner Set	Freemans	1
13	Mechanical Tools	Ratcheting Screwdriver Set	30 Piece Ratcheting Screwdriver Set	Dayton	1

14	Mechanical Tools	Vice Normal	Table top vice fitted to the table	Arch	1
15	Mechanical Tools	Screw Driver Set	6 Piece Precision Screw Driver Set	White Label	3
16	Mechanical Tools	Adjustable Universal Multi Wrench Spanner		Freemans	2
17	Mechanical Tools	Wire Strippers	Wire Stripper Cutter Plier With Spring -26x6x20 Cms (LxWxH)	Freemans	5
18	Mechanical Tools	Screwdriver	Multi-purpose	Powergrip	5
19	Mechanical Tools	Tool Set	Multi-purpose	CIC	3
29	Mechanical Tools	Cordless Drill	Cordless Drill with 2 Battery Pack	Powergrip	1
21	Mechanical Tools	Rubber Air Pump Cleaner Dust Blower	Rubber Air Pump Cleaner Dust Blower	VI Power	2
22	Mechanical Tools	Drill Bit Set	High Quality 13 Pcs HSS Drill Bits Set For for Wood, Iron, Aluminium, Plastic etc	Ultratouch	1
23	Mechanical Tools	File set	6 Inches	SE	1
24	Mechanical Tools	Flexible Cutting Mat	A/3 Size With Marked Pattern And Grids (18" X 12")	Morn Sun	2
25	Mechanical Tools	Plastic Tool Box with Organizer	For Keeping tools	Stuff	2
26	Mechanical Tools	PegBoard	Peg board System to mount tools on wall	White Label	1
27	Electric Tools	Hot glue gun	Range in open space (Standard Conditions)	Mega	2
28	Electric Tools	Soldering Kit	Variable Wattage of Soldering Iron: 15-30 watts/230 volts, Soldering Iron Temperature Range: 280°C to 450°C	Quckmax	2
			De-Soldering Pump, Soldering Flux (Paste) ,DE-soldering Copper Braid (Solder Wick)	White Label	2
				Kapoor	2
			Soldering Wire: 20/22 AWG soldering Wire with rosin core flux (100 Grams)	Quickflix	2
29	Electric Tools	Adapters	DC power Adapter with 5V, 12V	DVE	10
30	Electric Tools	Electric Screw Driver Set		Cliff	1
31	Electric Tools	Dual Temperature Heat Gun	1800 W Dual Temperature Heat Gun	Cliff	1
32	Electric Tools	Soldering Helping hand		EGO- Ace Enginners	2
33	Measurement Tools	Return measuring tape	Return measuring tape 5Mx19mm	Freemans	2
34	Measurement Tools	Stainless Steel Rule	Stainless Steel 12" / 150 mm Rule	Arch	5
35	Measurement Tools	Digital Vanier Calliper	150 mm / 6" Digital Vanier Calliper	Precision Measuring	2
36	Measurement Tools	Spirit Level	12" Spirit Level	Freemans	1

37	Measurement Tools	Digital Pen electric Tester	Voltage tester	Taparia	1
38	Measurement Tools	Digital Multi Meter	Digital Multi Meter Voltage Current Resistance-7 functions + 19 ranges to cover DC voltage 200mV to 1kV, AC voltage 200 V - 750 V, DC current 200 μ A - 10 A, Resistance 200 -2 M Ohm and Transistor & diode test.	Mastech	5
Package 4					
SI.No	Category	Name	Description	Brand	Quantity
1		Glue Sticks	11 mm x 200mm Hot Melt Glue Stick	Crown	50
2		Nuts and Bolts and screw	Various Size 20 each	White Label	20
3		Cable Tie	Small , Medium, Big in pack of 100 each	MIC	3
4		Sand Paper	Various Grit-80 4pcs 100 4pcs 120 4pcs	Shine cut	12
5		Power Strip Adaptors	5 Plug with Safety Fuse Standard Quality Extension, 3m wire	White Label	10
6		Bulb Holders	Regular Hanging Bulb holder	White Label	10
7		Electric Wires	Twisted Red black pair (Meter)	White Label	20
8		USB TO dc jack cable	USB to DC jack cable for Battery bank	White Label	10
9		Standard first aid kit		Carewell	1
10		Fire extinguisher (handy units)	Powder Type Fire Extinguisher 2KG	Safe pro	1
11		Safety goggles (with/ without LED torch)	Safety Goggles for Chemical Splash and Smoke from Soldering	Riginal Zoom Eye wear	10
12		Safety Gloves Pairs	Latex Coating Gloves (Medium Size)	White Label	3
13		Safety Mask	Filtering efficiency ranging 80 percent when tested against 0.3-micron sodium chloride particle	White Label	10