

**REQUEST FOR PROPOSAL (RFP)**  
**SUPPLY OF ITEMS FOR ESTABLISHMENT OF ATAL TINKERING LAB**  
**IN SENIOR WING APS BAREILLY**

1. Please reference advertisement published in local news paper Amar Ujala dated 24 Oct 2021.
2. Tender are invited from vendors having GST No to supply items/equipments for the Atal Tinkering Lab in Senior Wing of Army Public School, Bareilly in accordance to the specification is attached as Appendix 'A'. Sealed tenders are invited to be dropped in the sealed tender box on or before **10 Nov 2021 till 1200hrs**. The sealed tender will be opened by a board of officers on date and time to be intimated later.
3. General Information about the tender:-
  - (a) Tender reference No 1035/APS dated 25 Oct 2021.
  - (b) Last date and time for receipt of tenders 10 Nov 2021, 1200 hrs
  - (c) Time and date for opening of tenders will be intimated later.
  - (d) Place of opening of tenders – Senior Wing, Army Public School, Bareilly Cantt.
  - (e) Address for Communication- Senior Wing, Army Public School, Bareilly Cantt- 243001.
4. The tender shall be submitted **in single stage two - bid system**, of the Technical and Commercial bids.
5. Quotation shall remain valid up to 30 days from the date of opening of tender. (**Note: Bid Validity period may be increased/decreased on a case to case basis with the approval of CFA**).

**Submission/Opening of Tenders**

6. PLEASE QUOTE OUR RFP NO AND DATE OF TENDER OPENING ON SEALED COVER. FAILURE TO DO SO WILL RENDER YOUR OFFER INVALID.
7. The Technical and Commercial bids are to be submitted in two separate sealed envelopes, duly marked as "Technical Bid as per Appx 'A' for RFP No.1035/APS dated 25 Oct 2021 and "Commercial Bid for RFP No. 1035/APS dated 25 Oct 2021". The quotations are to be super-scribed with your firm's name, address, and official seal and ink signed by an authorized representative of the Tenderer. Sealed Bids addressed to Principal, Army Public School, Bareilly Cantt should be dropped in tender box located at Army Public School, Bareilly Cantt (Senior Wing), or to be sent by registered post so as to reach this office by due date and time. No responsibility will be taken for postal delay or non-delivery/non-receipt of tender documents. Tenders sent by fax would not be considered.
8. Sealed quotations will be opened by a committee on due date and time. Your authorized representative can attend the tender opening.

9. To avoid any complications with regard to Late Receipt/Non-receipt of Tenders, it may please be noted that responsibility rests with the tenderer to ensure that tenders reach this office before due date. Late quotes will be rejected out rightly.

10. Commercial offers will be opened only of those firms, who's Technical Offers have been found suitable after technical evaluation. Further negotiations will be made with the selected bidder (L1) as determined by the committee. The date, time and venue fixed for this purpose will be intimated separately.

11. **Earnest Money Deposit.** The bidders are required to deposit an EMD of Rs 16,000/- with a validity of 90 days in the form of an Account Payee Demand Draft or Fixed Deposit Receipt or Banker's Cheque or Bank Guarantee from any of the public or a private sector bank authorized to conduct government business.

12. **Requirement of Installation/Commissioning.**

(a) Delivery of items shall be completed within 03 weeks from the date of Supply order at Army Public School, Bareilly. On completion of delivery, APS Bareilly will issue a certificate.

(b) Installation including acceptance testing shall be completed within 02 weeks from the date of delivery at Army Public School, Bareilly. On completion of installation including acceptance and testing. Army Public School, Bareilly will issue a certificate.

13. **Delivery Period.** Delivery period for supply of items would be as given in paragraph 12 above. Please note that contract can be cancelled unilaterally by the Buyer in case items are not received within the contracted delivery period. Extension of contracted delivery period will be at the sole discretion of the Buyer, with applicability of LD clause 14.

14. **Liquidated Damages:** In the event of the seller's failure to submit the Bonds/ Guarantees and documents, supply the stores/ goods as specified in this contract. The buyer may, at his discretion, withhold any payment until the completion of the contract. The buyer may also deduct from the seller as agree liquidated damages to the sum of Rs. 0.5% of the contract price of the delayed/ undelivered stores/services mentioned above for every week of delay or part of a week, subject to maximum value of liquidated damages being not higher than 10% of the value of delayed stores/ services.

### **SPECIAL CONDITIONS**

15. **Performance Bank Guarantee,** The bidder will be required to furnish a Performance Guarantee by way of Bank Guarantee through a public sector bank or a private sector bank authorized to conduct Government business for a sum of equal to **05%** of the contract value **within 30 days** beyond the date of warranty. The specimen of PBG is att at **Appx.**

16. **Payment Terms.** The Payment Terms for the Contract Price shall be paid 100% amount of total value of contract shall be paid to the contractor on supply of items after approval by Inspection and checking committee on receipt of bills duly supported with all documents through cheque. Bills must clearly indicate GST registration No and detailed break-up of GST, failing which the payment will not be released.

17. **Repeat Order Clause**. School may place a repeat order for same items at the same cost within six months time period from the date of supply order.

18. **Acceptance Testing**. All items will be subjected to detailed acceptance testing procedure by a Board of Officers as per scope of work for the project. The details of the procedure will be worked out jointly by the vendor and the users. The specification of the items should be conformity with the details provided by the vendor and as per the given specifications. Any additional equipment needed for acceptance testing would be provided by the Vendor at his own cost. In case any item is found not as laid down specifications and the consignment rejected, the vendor shall remove the items from user premises at his cost. The user would issue an acceptance certificate on successful completion of acceptance testing.

19. **Mode of Payment**. One Time after checked by a Board for specification and smooth functioning of equipments through cheques

20. **Advance Payments**. No advance payment(s) will be made.

21. **Quality**. The quality of the stores delivered according to the present contract shall correspond to the technical conditions and standards valid for the deliveries of the same stores for in Seller's country or specifications enumerated as per TE and shall also include therein modification to the stores suggested by the Buyer. Such modifications will be mutually agreed to. The Seller confirms that the stores to be supplied under this Contract shall be new i.e. not manufactured before (Year of Contract), and shall incorporate all the latest improvements and modifications thereto and modified equipment. The Seller shall supply an inter changeability certificate along with the changed part numbers wherein it should be mentioned that items would provide as much life as the original items. The vendor should also committed to provide higher version of the product offered in case the offered product becomes obsolete or newer version is available without any change in the terms and conditions and prices quoted.

22. **Inspection Authority**. The inspection will be carried out by a Board of Officers on behalf of the buyer. The mode of inspection will be joint inspection.

23. **TERMS AND CONDITIONS**

(a) The contract will be given to the selected Vendor and the price quoted must remain valid for 6 months.

(b) The selected Vendor has to supply of items within 60 days from the date of Supply Order. This is a rate contract for a period of 180 days from the date of commencement of the contract.

(c) The school authorities have right to terminate the contract in case of unsatisfactory quality and quantity, or any other dispute and no claim whatsoever the contractor shall be admissible on this account.

(d) The Vendor will obey and observe the instructions issued by Principal, Army Public School, Bareilly purchase Committee or Competent Authority.

(e) The list of items is attached at Appendix 'B' will be brought by the vendor at the time of dropping of tender/ quotation. The supply of items for middle wing will be carried out in the school after verification its quantity and quality.

(f) It must be noted that only Bareilly Court have jurisdiction to entertain any proceedings related to this contract whether during pendency or after expiry/termination.

### **Pre-Bid Conference**

24. All clarifications are to be resolved in the Pre-Bid Conference alongwith a sample to be provided to the school on **08 Nov 2021** at Principal Office, Army Public School, Bareilly, prior submission of bids. No revision of Commercial Bid would normally be permitted after opening of the Technical Bid.

### **Commercial Bid**

25. The Commercial bid is to be submitted strictly in accordance with **Appendix 'B'** to this tender enquiry. The Commercial bid once opened, will not be subjected to unilateral revision by the firm, unless the firm is called for price negotiations specifically and asked to justify the rates.

### **Conditions under which this RFP is issued.**

26. This RFP is being issued with no financial commitment and school reserves the right to change or vary any part thereof at any stage. The school reserves the right to reject any or all of the offers without assigning any reason whatsoever. The school also reserves the right to withdraw the RFP, if necessary at any stage.

27. Please acknowledge receipt.

Thanking you,

Yours faithfully

(Aparna Tripathi)  
Capt (Retd)  
Principal

**TECHNICAL BID**

While dropping the quotation in quotation box/forward the sealed quotation, the following points to be taken care of :-

Ser No	Documents/Features of items	Documents produced by Vendor Yes/No	Remarks
(a)	Certificate of experience in supply of Atal Tinkering Lab items		
(b)	Certificate of firm's registration for GST, excise and TIN.		
(c)	ITCC for last two years		
(d)	List of establishment/ organization where your firm is executing supply alongwith a zerox copy of work order/certificate of satisfactory performance.		
(e)	Profile of company		
(f)	DD of Rs 16,000/- refundable as EMD		
(g)	Certificate for acceptance of terms & conditions mentioned in RFP.		

**Consignees Details:**

**The Principal**

Army Public School, Birdwood Lines,  
Bareilly Cantt - Pin -243001.

Date : Oct 2021

Signature of the Authorized Signatory Company's Seal

# COMMERCIAL BID

Appx 'B'

LIST OF EQUIPMENTS/ PACKAGES TO BE SUPPLIED UNDER ATL LAB SETUP						
S.No	Category	Name	Specification	Qty	Cost	Total
1	Electronics Development	Arduino Uno or equivalent	ATmega328P - 8 bit AVR family microcontroller, equivalent or better Operating Voltage: 5V Digital I/O Pins: 14 (of which 6 provide PWM output) PWM Digital I/O Pins : 6 Accessories : Case shell enclosure, compatible USB cable (length - 6 inch or more)	15		
2	Electronics Development	Arduino Nano or equivalent	ATmega328P - 8 bit AVR family microcontroller, equivalent or better. Operating Voltage: 5V Digital I/O Pins : 14 (of which 6 provide PWM output) Analog Input Pins : 8 Accessories : Compatible USB cable ( length -6 inch or more)	5		
3	Electronics Development	Arduino Mega or equivalent	AT mega 2560P - 8 bit AVR family microcontroller, equivalent or better. Operating Voltage: 5V Digital I/O Pins : 54 (of which 6 provide PWM output) Analog Input Pins: 16 Accessories: Case shell enclosure, Compatible USB cable ( length -6 inch or more)	5		
4	Electronics Development	Raspberry Pi 3 Model B+	RASPBERRY PI 3 MODEL B+, equivalent or better Accessories – Micro SD card - 32 GB, USB 3.0 cable (1 meter), HDMI to VGA – 1 meter, HDMI to VGA adapter, Case shell enclosure	2		
5	Electronics Development	Breadboards & Mini Breadboard	Solderless 400 pin breadboard	15		
6			Solderless 800 pin breadboard	10		
7			Self-Adhesive Proto Shield	10		
8	Electronics Development	General Purpose solderable Board	FR2 A Grade Material (140 x 90 mm)	15		
9			FR2 A Grade Material (80 x 55 mm)	15		
10		Berg Strips	Female Berg Strip, 2.54mm pitch, 40 pin single row, breakable pin	15		

11			Male Berg Strip, 2.54mm pitch, 40 pin single row, breakable pin	15		
12	Electronics Development	16x2 LCD display	Dot matrix LCD display. 16 characters X 2lines. I2C	10		
13	Electronics Development	USB Cables	USB Cable Set (A to B, 12 inch or more)	5		
14	Electronics Development	USB Cables	USB Cable Set (Mini, 12 inches or more)	5		
15	Electronics Development	Battery	9-12V 2000 to 2500 mAh rechargeable battery with 2 chargers. Equivalent or better	5		
16	Electronics Development	Resistor Kit	One kit contains - 30 carbon film resistors of 20 different resistance values each assorted, packaged together and labelled. Wattage: 0.125W to 1W Values: 00, 1.50, 4.70, 100, 470, 1000, 2200, 3300, 4700, 6800, 1k, 2.2k, 3.3k, 4.7k, 10k, 22k, 47k, 100k, 330k, 1M	10		
17	Electronics Development	Capacitor Kit	One kit contains - 20 electrolytic capacitors of 10 different capacitance values each. Assorted kit packaged together and labelled. Values: 10pF, 22pF, 100pF, 1nF, 10nF, 100nF, 1..1F, 14/F, 1001.1F, 1000pf	10		
18	Electronics Development	Linear Voltage Regulator	7805, 7812, 7809	15		
19	Electronics Development	Water Pump module	DC12V 3W Submersible Water Pump	2		
20	Electronics Development	Piezoelectric Plate	Normal Copper based 4 cm Diameter approx.	15		
21	Electronics Development	8*8 LED Matrix Module	Max7219 Dot LED Matrix Module. MCU Control LED Display Module	5		
22	Electronics Development	Bluetooth module	HC 05 Bluetooth module Voltage Rating: 5 V	7		
23	Electronics Development	7 Segment Led Display	LED 4-Digit Display Module Voltage Rating: 2.4V to 5.5V 4-Pin interface: Vcc, Gnd, Data, Clock	10		
24	Electronics Development	GSM	Sim 900 GPRS Transfer Board Micro Sim Gsm Core TTL Port Module for Arduino	2		
25	Electronics Development	GPS	GY-NEO6MV2 new GPS module	2		
26	Electronics Development	Laser Diode Emitter	650 nm 5mW Mini Laser Dot Diode Module	5		
27	Electronics Development	LDR Module	5mm/12mm, Photosensitive LDR Light Sensor Module	15		

28	Electronics Development	Keypad	Universal 16 Key Switch Keypad	5		
29	Electronics Development	Joy Stick	2-axis joystick with push button function	5		
30	Electronics Development	Active Buzzer	Small 5 volt	20		
31			Big 5 volt	20		
32	Electronics Development	Motor driver Module	L293D	5		
33	Electronics Development	Sound Playback Module	ISD1820 voice recording module or equivalent	5		
34	Electronics Development	DC Plastic Gear motor with wheel	12V, 150RPM, Side Shaft BO (Battery operation) Motor	20		
35	Electronics Development	Node MCU	ESP 8266 I2C, 1 wire, plug and play	3		
36	Electronics Development	WeMos D1 R2	WeMos D1 R2 with WiFi ESP 8266 Operating Voltage: 5V	3		
37	Electronics Development	Vibrating Motor	Weight: 10 Grams Operating Voltage: 1.5 to 3V	10		
38	Electronics Development	Alligator Connectors	Multi-Colour Alligator Connectors - 12 inch	100		
39	Electronics Development	Battery clips with DC Jack	9-volt battery clips with DC Jack	20		
40	Electronics Development	Hook-up Wires	Red & Black set 100 Meters each	2		
41	Electronics Development	Jumper Cable	Male-Male	500		
42		Jumper Cable	Male-Female	300		
43		Jumper Cable	Female-Female	200		
44	Electronics Development	RGB LEDs	Regular 5mm 3-5 volt Range	200		
45	Electronics Development	LEDs (Red)	Regular 5mm 3-5 volt Range	500		
46	Electronics Development	LEDs (Green)	Regular 5mm 3-5 volt Range	500		
47	Electronics Development	LEDs (Blue)	Regular 5mm 3-5 volt Range	500		
48	Electronics Development	LEDs (Yellow)	Regular 5mm 3-5 volt Range	500		
49	Electronics Development	LEDs (White)	Regular 5mm 3-5 volt Range	500		
50	Electronics Development	Timer IC -LM 555	LM 555 Timer IC. Voltage range - 4.5V to 16V	15		



51	Electronics Development	Atmega16u2	8 bit microcontroller Individual IC (DIP). Voltage range: 2.7V to 5.5V. Operational Range: - 40°C to +80°C	5		
52	Electronics Development	diodes and transistors kit	One Kit Contains - 25 Assorted Basic Diodes of 4 different types each. Types: NPN Transistor - 2N3904, BC547 PNP Transistor - 2N3906, BC557 Silicon Diode - 1N4148, Power Diode - 1N4004/4001. Equivalent or better. Wattage: 1W, Current rating: 1A Assorted kit packaged together and labelled.	1		
53	Electronics Development	button switch set	One Kit Contains - 100 buttons of different types. Types: Push, toggle, rotary, selector and slide switch. Assorted kit packaged together and labelled.	1		
54	Electronics Development	capacitive touch module	MPR 121 with I2C. Voltage Range: 2.5V to 3.6V DC.	10		
55	Electronics Development	capacitive touch switch module	Digital Capacitive touch switch module - TTP223B Voltage Range: 2V to 5V DC.	5		
56	Internet of Things & Sensors	IR sensors, obstacle avoider sensor module	LM393 Detection distance: 2 - 30 cm Detection angle: 30 - 40°	10		
57	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 o/p rate	5		
58	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	5		
59	Internet of Things & Sensors	MQ Series	MQ- 2 Smoke Detection	1		
60			MQ-3 Alcohol - Ethanol Sensor	1		
61			MO-4 Methane Natural Gas Sensor	1		
62			MQ-5 Methane Liquified Gas Sensor	1		
63			MQ-6 Liquified Petroleum Gas Sensor	1		
64			MQ-7 High Sensitivity	1		
65			CO Carbon Monoxide Sensor Detector	1		
66			MO-8 Hydrogen Gas Sensor	1		
67			MQ-135 Air Quality Sensor	1		

68	Internet of Things & Sensors	IR transmitter/receiver	TSOP 1738 Switching rate: 38 KHz Voltage Rating: 5V	5		
69	Internet of Things & Sensors	Ultrasonic Sensor Module HC-SR-04 or compatible	Working Voltage - DC 5V Working current - 15 mA Working Frequency - 40 Hz Range - 1cm to 4 m Effectual Angle - <15° Measuring Angle - 30° Resolution - 0.3 cm	20		
70	Internet of Things & Sensors	Triple Axis accelerometer - LFCSP	3-axis sensing Small, low profile package 4 mm x 4 mm x 1.45 mm Low Power: 350 p.A (typical) Single-supply operation: 1.8 V to 3.6V Temperature stability	5		
71	Internet of Things & Sensors	PIR Motion Detector Module	High digital pulse when motion detected Low digital pulse when idle /no motion detected Sensitivity range (up to 6 m) Power supply: 5V — 12V	10		
72	Internet of Things & Sensors	Pulse Rate Heart Sensor	Pulse Rate Sensor Finger Based (finger or earlobe) Working voltage 3-5V	2		
73	Internet of Things & Sensors	Relay Module	5V 10A - 2 Channel Relay Module. Compatible with Arduino.	10		
74	Internet of Things & Sensors	Relay Module	5V 10A - 1 Channel Relay Module. Compatible with Arduino.	10		
75	Internet of Things & Sensors	Big Sound microphone module	Large Electret capsule sound module	5		
76	Internet of Things & Sensors	Soil Moisture Sensor module	FC-28 with LM293 comparator Operating Voltage: 3.3V to 5V.	3		
77	Internet of Things & Sensors	Touch Sensor	Capacitive Touch Sensor Module. TTP22X series. Voltage Range: 2.4V to 5.5V	3		
78	Internet of Things & Sensors	Metal Touch Sensor Module	KY-036 or equivalent metal touch sensor module	3		
79	Internet of Things & Sensors	Rain Drop Sensor	Rain Sensitive, Rain Drop Detection Sensor Module. Voltage Range: 3.3V to 5.5V. Size: 5mm X 40mm or equivalent.	3		
80	Internet of Things & Sensors	Flex Sensor	Flex Sensor. Size - 2.2 Inches	3		
81	Internet of Things & Sensors	Temperature Sensor	LM35 Full range temperature sensor. Voltage Range: 4V to 30V. Error: ±0.5°C	3		

82	Internet of Things & Sensors	Temperature and humidity sensor module	DHT 11 Voltage Range: 3V to 5V	20		
83	Internet of Things & Sensors	Force Pressure Sensor	Force sensitive resistor with a square, 1.75x1.5" sensing area	2		
84	Internet of Things & Sensors	Colour Recognition Sensor	TCS3200 Colour Recognition	2		
85	Internet of Things & Sensors	Water Flow Sensor	Arduino Compatible Water flow sensor. 5V DC Input.	2		
86	Internet of Things & Sensors	Sound Sensor	Sound Sensor Module, Microphones module	5		
87	Internet of Things & Sensors	IR Sensors Array module for Line Following	8 IR Sensors Array module for Line Following Operating Voltage: 5V	5		
88	Internet of Things & Sensors	Power Bank	10000 mAh 5-volt Power Bank	2		
89	Internet of Things & Sensors	RFID Reader — Tags	Current :13-26mA / DC 3.3V Idle Current :10-13mA Sleep Current<80uA Peak Current<30mA Operating Frequency: 13.56MHz<30mA Read range between 20 cm to 1m	5		
90	Internet of Things & Sensors	RF Modules Tx & Rx 315MHz ASK	Frequency Range: 433.92/315 MHz Supply Voltage: 3 — 6 V Output: 4 — 16 Dbm Low power consumption Easy application	5		
91	Robotics	Stepper motor with Driver board	28BYJ-48 ULN2003 5V Stepper Motor + ULN2003 Driver Board	5		
92	Robotics	DC motor	12V DC Gear 150 RPM	10		
93	Robotics	Servo motors	Position Servo Angle based Metal Gear	5		
94			Small Servo Metal Gear	5		
95			Continuous Metal Gear Servo 360	5		
96			Small Servo Plastic Gear	20		
97	Robotics	150 RPM BO Motor	150 RPM BO Motor	5		
98	Robotics	L298P Motor Driver	L298P Motor Driver Shield or relative DriverShield	5		
99	Robotics	Servo Motor Tester	CCPM 3 channel Servo Tester	2		

100	<b>STEM Learning/ Application Kit</b>	<b>Drone Kit</b>	Educational purpose	1		
101		<b>Aerospace Kit</b>		1		
102		<b>Automobile Kit</b>		1		
103		<b>Bio-Medical Kit</b>		1		
104		<b>Agri-Tech Kit</b>		1		
105		<b>Water/ Sanitation Kit</b>		1		
106		<b>Bio Tech Kit</b>		1		
107		<b>Other Potential STEM Application Kit</b>		1		
108	<b>Astronomy Equipment</b>	<b>Telescope</b>	All glass optical components A Itazimuth mount suitable for terrestrial and astronomical use Minimum 700 mm focus	1		
109	<b>Biology Kit</b>	<b>DIY Paper Microscope</b>	DIV Paper microscope. Magnification range – 100x to 2000x	2		
110	<b>VR</b>	<b>Hard VR headset</b>	VR headset where students can Develop the app and install it in the mobile phone Insert the mobile phone into the headset	5		
111	<b>VR</b>	<b>DIY Hologram kit</b>	Pyramid based hologram  Base stilt structure  Side slides for reflection prevention	5		
112	<b>VR</b>	<b>Bluetooth remote</b>	Bluetooth remote that has the following functionality  360 degrees joystick  2 pairing modes  4 mode buttons  2 configurable joysticks	2		
113	<b>AI prototyping software</b>	<b>AI prototyping software</b>	Desktop software with user interface that can: Teach students how to identify object based on data inputs  Teach students how to predict data	1		

			<p>Teach students how to train a machine to recognize images</p> <p>Software should be capable of displaying the machine's learning accuracy</p> <p>Software should be capable of testing the machine's learning</p> <p>Student must be able to change the method by which a machine will learn</p>			
114	<b>Pick and Place Robotic Arm</b>		<p>Android App for programming and controlling the motion</p> <p>Arduino compatible (included)</p> <p>Bluetooth module</p> <p>NiMh battery compatible</p> <p>4 servo motors</p> <p>2 Joysticks included</p>	4		
115	<b>Mega Drone Kit – Drone Simulator License</b>	<b>Drone Simulator</b>	<ol style="list-style-type: none"> <li>1. Desktop application for simulation of drone flight.</li> <li>2. Drone training and operation on drone movements.</li> <li>3. Meeting and completing challenges on the software.</li> <li>4. Windows 10 or Browser based version (Needs 2 GB RAM).</li> </ol>	1		
116	<b>Basic Quad Copter Drone</b>	<b>Basic Quad Copter Drone</b>	<ol style="list-style-type: none"> <li>1. Primus V4 STM32F303: 72Mhz Controller.</li> <li>2. Total 4 MOSFET drives.</li> <li>3. 10-DOF sensor suite.</li> <li>4. WIFI interface.</li> <li>5. 10 Minutes flight time: 600mAH Battery.</li> <li>6. Range: 60m.</li> <li>7. Programmable with Cygnus IDE in</li> </ol>	1		

			<p>C++.</p> <p>8. Payload max 15 gm.</p> <p>9. Total weight 85 gm.</p> <p>10. Size 16cmX 16cm.</p> <p>11. Lipo Battery 600 mAh.</p>			
117	<b>Mega Quad Copter Drone</b>	<b>Mega Quad Copter Drone</b>	<p>1. Total 4 MOSFET drives.</p> <p>2. 10-DOF sensor suite.</p> <p>3. WIFI interface.</p> <p>4. 10 Minutes flight time: 600mAH Battery.</p> <p>5. Range: 60m.</p> <p>6. Programmable with Cygnus IDE in C++.</p> <p>7. Payload max 15 gm.</p> <p>8. Total weight 85 gm.</p> <p>9. Size 16cm X 16cm.</p> <p>10. Lipo Battery 600 mAh.</p>	1		
<b>Package 2: Rapid Prototyping Tools</b>						
1	<b>Rapid Prototyping Tools</b>	<b>3D Printer Kit and tools</b>	<p>Printer Type :FDM (Fused Deposition Modelling), Minimum Dimensions : 160mm * 160mm *160mm Build Size or 4 litre Build Volume., Nozzle: 0.3mm to 0.4mm nozzle diameter, slicing software should be free or Open source, LCD Screen UI that display print metrics, Good Heated Print bed. Material Compatibility - PLA, ABS, and derivatives of PLA, Ninjaflex Quality Anti- bacterial/fungal Cover. Repair Kit - with spare springs, screws, keys, tweezers etc.</p>	1		
3	<b>Rapid Prototyping Tools</b>	<b>Filament for3D printer</b>	<p>Compatible 1000 Grams Filament in 5 different colours</p>	2		
4	<b>Rapid Prototyping Tools</b>	<b>Filament Storage Box</b>	<p>Compatible Filament storage box</p>	2		

5	<b>Rapid Prototyping Tools</b>	<b>Set of Arts &amp; Crafts Accessories - e.g.- stationary items and basic prototyping material</b>	Cardboard	2		
6			Foam -core boards	2		
7			20m spool of thick strings various colour	2		
8			Rubber band	50		
9			Popsicle sticks	50		
10			Wood glue - 500 ml	1		
<b>Package 3: Mechanical, Electrical and Measurement tools</b>						
1	<b>Mechanical Tools</b>	<b>Hacksaw Frame</b>	Size: U inches	1		
2	<b>Mechanical Tools</b>	<b>Hacksaw blades</b>	Size: 12 inches	5		
5	<b>Mechanical Tools</b>	<b>Pliers: 4.5-inch size</b>	External Straight	1		
7			long nose plier	1		
9			Wire stripping pliers	1		
12	<b>Mechanical Tools</b>	<b>Tweezer Set</b>	6 Pc Non-Magnetic Tweezer Set Size • 6inches	1		
14	<b>Mechanical Tools</b>	<b>Steel Shaft Claw Hammer</b>	Claw Hammer Steel Shaft Weight - 0.75kg	1		
15	<b>Mechanical Tools</b>	<b>C-Clamp</b>	Metal Clamp; 3-inch size	2		
16	<b>Mechanical Tools</b>	<b>Allen Key Set</b>	10 Piece Ring Imperial Allen Hex key	1		
17	<b>Mechanical Tools</b>	<b>Drill Machine Set</b>	Drill Machine with accessories Hammer/Screw and clockwise/anticlockwise modes. Power: SOOW Chuck capacity - 1to 10 mm Drill Bits - Masonry, Metal, Wood	1		
18	<b>Mechanical Tools</b>	<b>Drilling Workstation</b>	Drill Press, Drill Holder and Rotary Tool,Compatible with Drilling machine provided	1		
19	<b>Mechanical Tools</b>	<b>Spanner Set</b>	12-piece combination Spanner Set Range - 4 mm to 30 mm	1		
20	<b>Mechanical Tools</b>	<b>Vice Normal</b>	Table top vice	1		
21	<b>Mechanical tools</b>	<b>Precision Screw Driver Set</b>	6 Piece Precision Screw Driver Set Types:PHO, PHI, Flat head - 1.4mm, 2mm,2.4mm,3mm	1		

22	Mechanical tools	Wrench	Adjustable Universal Wrench	1		
23	Mechanical tools	Wire Strippers	Wire Stripper Cutter Plier With Spring -26x6x20 cm (LxWxH)	2		
24	Mechanical tools	Screwdriver	40 pc Multi-purpose screwdriver set	1		
25	Mechanical tools	air blower	500 w or more. Variable speed blower	1		
26	Mechanical tools	Drill Bit Set	High quality 13 pcs HSS Drill bit set for wood, Iron, aluminium, plastic etc.	1		
27	Mechanical tools	File Set	6 pc file set Working length-6 inch	1		
28	Mechanical tools	Mini file set	6 pc mini file set Working length-3 inch	1		
29	Mechanical tools	Flexible Cutting Mat	A3 size with marked Pattern and grids(18"*12")	1		
30	Mechanical tools	Plastic storage drawer/organiser	Numbers of drawer: 60 or equivalent Drawersize(l*W*D) Inch:2*2*5	1		
31	Mechanical tools	Pegboard	Peg board system to mount tools on wall with attachments. Size: 3ft*2ft	1		
32	Electric Tools	Hot glue gun	Works with standard 0.5- inch glue sticks. Temperature - 230 to 280 degree Celsius.	2		
33	Electric Tools	Soldering Kit	Variable Wattage of Soldering Iron: 15-30 watts/230 volts Soldering Iron Temperature Range: 280°C to 450°C De-Soldering Pump, Soldering Flux (Paste) 100 grams, DE- soldering Copper Braid (Solder Wick) - 1.Sm*2mm Compatible Soldering Tip - Bevel, Chisel, Conical - 5 each per kit. Soldering Wire:20/22 AWG soldering Wire with rosin core flux (100 Grams)	2		
34	Electric Tools	Adapters	DC power Adapter with SV, 2A	5		
35	Electric Tools	Adapters	DC power Adapter with 12V, 2A	5		
36	Electric Tools	Electric Screw Driver Set	Multipurpose Electric screw driver set. Accessories - Compatible bits Mode - Wireless Battery - Li- ion 3.6V or equivalent with charging dock	1		



37	Electric Tools	Dual Temperature Heat Gun	1800 W Dual Temperature Heat Gun	1		
38	Electric Tools	Soldering Helping hand	Specifications: Adjustable crocodile holding clamps/clip. Soldering iron holder. LED light. Magnifying lens.	2		
39	Measurement Tools	Return measuring tap	Return measuring tape 5Mx19mm	1		
40	Measurement Tools	Stainless Steel Rule	Stainless Steel 12" / 150 mm Rule	2		
41	Measurement Tools	Digital Vernier Calliper	150 mm   6" Digital Vernier Calliper	1		
42	Measurement Tools	Spirit Level	12" Spirit Level	1		
43	Measurement Tools	Digital Pen electric: Tester	Voltage tester	1		
44	Measurement Tools	Digital Multi Meter	Digital Multi Meter Voltage Current Resistance-7 functions + 19 ranges to cover DC voltage 200mV to KV AC voltage 200 V -750 V, DC current 200 $\mu$ A - 10 A Resistance 200 -2 M Ohm and Transistor & diode test.	2		
<b>Package 4: Power Supply &amp; Accessories and Safety Equipment</b>						
1	Power Supply & accessories	Glue Sticks	11mm x 200mm Hot Melt Glue Stick	50		
2	Power Supply & accessories	Nuts and Bolts and screw	Specs - M4X12MM M4X20MM M5X16MM M5X25MM M6X20MM	20		
3	Power Supply & accessories	Cable Tie	Small Cable Tie Pack - Pack of 100	5		
4			Medium Cable Tie Pack - Pack of 100	5		
5			Big Cable Tie Pack -of 100	5		
6	Power Supply & accessories	Sand Paper	Grit Values - 80, 100,120, 200,300 5 Nos of each	5		
7	Power Supply & accessories	Power Strip Adaptors	Standard Quality Extension with 5 Amp safety fuse. 5 or more sockets in each extension. 5-meter length of each extension.	2		
8	Power Supply & accessories	Bulb Holders	Regular Hanging Bulb holder	5		

9	<b>Power Supply &amp; accessories</b>	<b>Electric Wires</b>	Twisted Red black pair	10		
10	<b>Power Supply &amp; accessories</b>	<b>USB TO DC jack cable</b>	USB to DC jack cable for Battery bank	5		
11	<b>Safety equipment</b>	<b>First-Aid Kit</b>	Standard Medical First Aid kit in portable container.	1		
12	<b>Safety equipment</b>	<b>Fire extinguisher (handy units)</b>	Powder Type Fire Extinguisher 2KG	1		
13	<b>Safety equipment</b>	<b>Safety goggles (with/ without LED torch)</b>	Polycarbonate Safety goggles Clear lens with no tint	15		
14	<b>Safety equipment</b>	<b>Safety Gloves Pairs</b>	Latex Coating Gloves (Medium Size)	5		
15	<b>Safety equipment</b>	<b>Safety Mask</b>	Filtering efficiency ranging 80 percent when tested against 0.3 micron sodium chloride particle	10		