

1. **Arduino Uno** (ATmega328P 8-Bit family microcontroller, Operating voltage 5v, Digital IO 14 Pin , Analog IO 8 Pins,case shell and compatible USB cable) 30-Units.
2. **Arduino Nano** (ATmega328P 8-Bit family microcontroller, Operating voltage 5v, Digital IO 14 Pin , Analog IO 8 Pins,case shell and compatible USB cable) 10-Units.
3. **Arduino Mega** (ATmega2560P 8-Bit family microcontroller, Operating voltage 5v, Digital IO 54 Pin , Analog IO 16 Pins,case shell and compatible USB cable) 10-Units.
4. **Raspberry Pi 3 Model B+** (Accessories 32 GB MicroSD card,USB3.0 cable 1mtr, HDMI to VGA 1mtr, HDMI to VGA Adaptor) 5-Units
5. **Breadboard** (Solderless 400 pin breadboard 30-Units, Solderless 800 pin breadboard 20-Units, self adhesive proto shield-20Units)
6. **General purpose solderable board** ((FR2 A grade Material (140x90mm)30-Units), (FR2 A grade Material (80x55mm)30-Units))
7. **Berg strips** ((Female berg strip, 2.54mm pitch, 40 pin single row breakable pin 30 units),(Male bergstrip, 2.54mm pitch, 40 pin single row breakable pin 30 units))15-Units
8. **16x2 LCD Display** (Dot matrix LCD display, 16 characters X 2 lines, I2C)20-Units
9. **USB cables** ((A to B, 12 inch 10 Units),(Mini, 12 inch 10 units))
10. **Battery** (9-12V 2000 to 2500 mAh rechargeable batteries with 2 charger)10-Units
11. **Resistor Kit** (One kit contains 30 carbon film resistors of 20 different resistance value of 0Ω, 1.5Ω, 4.7Ω, 10Ω, 47Ω, 100Ω, 220Ω, 330Ω, 470Ω, 680Ω, 1kΩ, 2.2kΩ, 3.3kΩ, 4.7kΩ, 10kΩ, 22kΩ, 47kΩ, 100kΩ, 330kΩ, 1MΩ (Wattage 0.125-1W))20-Units
12. **Capacitor Kit** (One kit contains 20 electrolytic capacitors of 10 different capacitance value as 10pF, 22pF, 100pF, 1nF, 10nF, 100nF, 1μF, 10μF, 100μF, 1000μF)20-Units
13. **Linear Voltage Regulator** (7805,7812,7809)30-Units
14. **Water Pump module** (DC12V 3W submersible water pump)4-Units
15. **Piezoelectric plate** (Normal copper base 4cm diameter approx)30-Units
16. **8*8 LED matrix module** (Max7219 dot LED matrix module, MCU control LED display module)10-Units
17. **Bluetooth module** (HC 05)15-Units
18. **7 Segment LED display** (LED 4 digit display module,2.5V-5.5V, 4 pin interface: Vcc, Gnd, Data, Clock)20-Units
19. **GSM** (sim900 GPRS transfer board Micro SIM GSM core TTL port module for Arduino)4-Units**GPS** (GY NEO6MV2 new GPS Module)4-Units
20. **Laser Diode Emitter** (650nm 5mW Mini laser Dot Diode Module)10-Units
21. **LDR Module** (5mm/12mm photosensitive LDR light sensor module)30-Units
22. **Keypad** (Universal 16-key switch Keypad)10-Units
23. **Joystick** (2-axis Joystick with push button function)10-Units
24. **Active Buzzer** (Small 5V 40-Units, Big 5V 40-Units)
25. **Motor Driver Module** (L293D)10-Units
26. **Sound Playback Module** (ISD 1820 voice recording module)10-Units
27. **DC plastic motor with wheel** (12V, 150RPM, Side shaft BO motor)40-Units
28. **Node MCU** (ESP8266, I2C, 1 wire, plug and play)6-Units
29. **WeMos D1 R2** (WeMos D1 R2 with wifi ESP 8266)6-Units
30. **Vibrating Motor** (Weight 10 Grams, 1.5V-3V)20-Units
31. **Alligator Connectors** (Multi-color alligator connectors-12inch)200-Units
32. **Battery clips with DC Jack** (9V battery clips with DC Jack)40-Units
33. **Hook-up wires** (Red and Black set 100mtr each)4-Units
34. **Jumper Cables** (Male-Male1000Units, Male-Female 600Units, Female-Female 400Units)
35. **LEDs Regular 5mm 3-5V** (RGB-400Units, Red-1000Units, Green-1000Units, Yellow-1000Units, Blue-1000Units, White-1000Units)
36. **Timer-IC LM555** (LM555,4.5V-16V)30-Units
37. **Atmega16u2** (8-bit microcontroller individual IC, 2.7V-5.5V)10-Units
38. **Diode and Transistors Kit** (One kit contains 25 assorted basic diodes of four different types: NPN transistor-2N3904, BC547, PNP Transistor- 2N3906, BC557, Silicon Diode-1N4148, Power Diode-1N4004/4001)3-Units
39. **Button Switch set** (One kit contains 100 button of different types(toggle, push, rotary, selector and slide switch))3-Units
40. **Capacitive touch Module** (MPR 121 with I2C, 2.5V-3.6V)10-Units
41. **Capacitive touch Switch Module** (TTP223B,2V-5V DC)20-Units
42. **IR Sensor, Obstacle avoider Sensor module** (LM393, detection distance 2-30 cm, detection angle 30-40°)20-Units
43. **Triple Axis Magnetometer** (3-axis magneto resistive sensor, I2C digital interface, integrated 12-bit ADC, Range -8 to +8 Gauss, Max 160Hz output rate)10-Units
44. **Humidity Sensor** (Operating range 20-95% RH, Temp 0-60 Celsius, 1.5V AC, Operating frequency 500Hz-2Khz)10-Units
45. **MQ Series** (MQ-2 Smoke detection 3-Units, MQ-3 Alcohol Ethanol sensor 3-Units, MQ-4 Methane Natural Gas Sensor 3-Units, MQ-5 Methane Liquefied Gas Sensor 3-Units, MQ-6 LPG Sensor 3-Units, MQ-7 CO- Carbon Monoxide Sensor 3-Units, MQ-8 Hydrogen Gas Sensor 3-Units, MQ-135 Air quality Sensor 3-Units)
46. **IR Transmitter / Receiver** (TSOP 1738, switching rate 38KHz, 5V)10-Units
47. **Ultrasonic Sensor** (HC-SR-04, DC 5V, 15mA, 40Hz,Range 1 cm to 4m, effectual angle <15, measuring angle 30, resolution 0.3cm)40-Units
48. **Triple Axis Accelerometer** (3-axis sensing, 4mm x 4mm x 1.5mm LFCSP, 1.8V-3.6V, temperature stability)10-Units
49. **PIR Motion Detector Module** (sensitivity range up to 6m, 5-12V)20-Units
50. **Pulse rate heart Sensor** (Finger based, 3.3V-5V)4-Units
51. **Relay Module** (5V 10A 2 Channel relay module 20-Units, 5V 10A 1 channel relay module 20-Units)
52. **Big Sound microphone module** (Large electrets capsule sound module)10-Units
53. **Soil Moisture Sensor** (FC-28 with LM293, 3.3V-5V)6-Units
54. **Touch Sensor** (Capacitive touch sensor module,TTP22X Series, 2.4V-5.5V)6-Units
55. **Metal Touch Sensor Module** (KY-036 or equivalent metal touch sensor module)6-Units
56. **Rain drop Sensor** (Rain sensitive, rain drop detection sensor Module 3.3-5.5V, size 5mmx40mm)6-Units
57. **Flex Sensor** (Size 2.2 inches)6-Units
58. **Temperature Sensor** (LM35 4V-30V Error +/-0.5)6-Units
59. **Temp and Humidity Sensor** (DHT 11 Voltage 3 to 5V)40-Units
60. **Force Pressure Sensor** (1.75x1.5 sensing area)4-Units
61. **Water flow sensor** (Arduino Compatible 5V DC)

ATAL TINKERING LAB OF NITI AAYOG ELECTRONICS DEVELOPMENT, ROBOTICS, INTERNET OF THINGS AND SENSORS (Arduino)

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