

JECRC-IAMC TASK 1

Submitted by – Jeshurun Solomon

Environmental Monitoring System

Component	Function	Estimated Cost	Power supply
ESP32 Microcontroller	manages sensor data, communication, and control	419/- INR	3.3 V
DHT22 Sensor	Measures temperature and humidity	394/- INR	3.3 V
Capacitive Soil Moisture Sensor	Measures soil moisture	360/- INR	3.3 V
Lithium-Ion Battery (2000mAh)	Stores power for system operation	700/- INR	12 V
Miscellaneous Components (Wires, PCB, Connectors)	General assembly components	500/- INR	
Buck Converter	Voltage regulator	80/-	
SD Card Module	Data storage for sensor readings	500/-	