## **MECHANICAL PROJECTS 2025 - 26**

\*\*Innovative Problem Statement & Solutions based Projects marked in "Bold Violet Color" \*\*

- Automatic Waste Segregation (Separation) System for Industries for Metal, Plastic and Wet Substances
- 2. Solar Based Energy Efficient Automatic Grass Cutting Robot / Lawn Mover
- 3. IoT based Smart Environmental Pollution Monitoring Robot (Based Highly Polluted Cities Such as Delhi)
- 4. ROBOTIC arm with base rotation, elbow and wrist motion with a functional gripper for pick and place applications using Android App Control
- Automatic Record and Play Robotic Arm using Learning Mechanism for Industrial Automation
- 6. Toxic / Dangerous Gas Monitoring Robot for Chemical Industries using IoT
- 7. Anti collision ROBOTIC vehicle with Android based movement Control
- 8. Android based Land Mine detecting ROBOT with Wireless Camera (Optional)
- Accident Avoiding System with Crash Detection with GPS and GSM basedNotification
- 10. Development of Data Acquisition Robot for Toxic environmental monitoring and Sending Data directly to PC using Zigbee
- 11. Smart Fire and Gas Leakage Detection Robot with Android and IoT Technology
- 12. Intelligent investigating pipeline ROBOT with WIRELESS camera and Temperature

  Sensor for industrial application –
- 13. Advance Military Spying and bomb disposal ROBOT with Wireless RF Camera

- 14. Smart Speech controlled ROBOT wheel Chair for paralyzed person
- **15.** Gas Pipe leakage detection ROBOT with Wireless high alert notification
- 16. Autonomous Railway track Crack detection ROBOT with Remote station Alert system using GPS and GSM
- 17. LPG gas detecting ROBOT with WIRELESS video transmission
- 18. PC based surveillance ROBOT with wireless video transmission
- 19. Hybrid Windmill and Solar based High efficient Power Generation System
- **20.** Mini Conveyor Belt Mechanism based on Industrial Automation
- 21. Advanced Footstep Power Generation System using Piezo Electric Material
- 22. Foot Step Power Generation with AC Inverter for 220V AC Voltage Genration using Piezo Electric Material
- 23. Floor Cleaning Robot with RF Camera and Obstacle Detection using Android based Control System Control Syste
- 24. Hand gesture (MEMS) based ROBOTIC arm control (prosthetic limb) for physically disabled.
- 25. Android and Solar based Grass Cutting Lawn Mower
- 26. Automatic vehicle over speed control system for School / Hospital zone to avoid

  Accident
- 27. Wireless Joystick Controlled 3DOF Crane for Material Handling
- 28. Dual Brush Floor Cleaning Robot with RF Control
- **29.** Live human detecting robot for earthquake rescue operation using gsm and gps.
- 30. Head movement controlled car driving system to assist the physically challenged
- 31. Solar based Smart Seed Sowing Robot for Agriculture with Android based Control

  System
- 32. 3 Degree of Freedom Robotic Arm control from anywhere in the World using IoT

- 33. Live Human Detecting Robot for Human Rescue operation using Android Control
- 34. Smart Indoor Robot Control Localization System using Wi-Fi
- **35.** Joystick controlled steering mechanism vehicle
- **36.** Wireless Flex Sensor based Robotic Vehicle Control System
- 37. Flex sensor based glove to mimic / control ROBOTIC wrist
- 38. Android App Control based pick and place ROBOT Vehicle for Industries
- 39. Automatic Smart & Energy efficient Solar grass cutter using Ultrasonic Sensor
- 40. Automatic conveyor belt start and stop mechanism on object detection to save power
- 41. Color based Material Counter with Conveyor belt mechanism
- 42. Solar Powered Vehicle for Material Handling Robot with Wireless control
- 43. Advance Path Learning (Remembering) Robot for Industrial Automation
- **44.** Rough terrain beetle ROBOT
- 45. Auto guided vehicle with material handling and obstacle detection
- 46. Auto Metro Train To Shuttle Between Stations
- 47. Android Phone Accelerometer Sensor based Robot Navigation
- **48.** Infrared light tracing ROBOT (TV remote controlled)
- 49. Bus Detection and Announcement System for Blind People using RF ID Technology
- **50.** Accurate speed control of car using ARDUINO
- **51.** Fire Extinguishing Robot with Voice based alert System
- 52. RF remote based Wireless Pipeline Robot with WIRELESS camera for Pipeline Inspection
- 53. RF Controlled Fork Lift for Industrial Automation
- 54. Design and Development of Servo / DC Motor Based Solar Panel Tracking System for Energy Efficiency
- 55. Voice Recognition based Wheel Chair / Car Control for Physical Disabled Person

	<b>56.</b>	<b>RF Controlled</b>	<b>Night Vision</b>	Spying R	obot with	Arduino	Controll
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- 57. Android mobile phone accelerometer based ROBOT control
- 58. Light sensing (follower) ROBOT –
- 59. Gesture controlled ROBOT -
- **60.** Wildlife observation ROBOT using android control
- 61. Wired industrial ROBOTIC arm --
- **62.** CNC based writing machine using android (CNC plotter)
- **63.** CNC based writing machine using PC (CNC plotter)
- 64. Poisonous gas detecting ROBOT with android control and Parameter Monitoring
- 65. Hand gesture based wheel chair control for physically disabled Person
- 66. Wildlife observation ROBOT with RF control and Wireless Camera
- 67. WIRELESS industrial ROBOTIC arm with PC automation -
- 68. Silent land mine detector with SMS alert --
- 69. Arduino based RF control ROBOT for industries
- 70. Smart Room cleaning ROBOT with Anti Collision technology
- 71. Solar based Gravitation (G Sensor ) Controlled ROBOT
- 72. PC based WIRELESS pick and place ROBOT for industrial application
- 73. Anti collision technique using ultrasonic sensor with SMS alert -
- 74. Swarm ROBOTICS (Pair of 2 ROBOTs) with automated control(based on Team work between Future Robots)
- 75. DTMF controlled ROBOT --
- **76.** RF controlled ROBOT –
- **77.** Quad copter
- 78. Speech recognition ROBOT using ARDUINO –
- 79. Path tracking ROBOT (line follower) --
- **80.** Obstacle avoiding ROBOT (using ultrasonic sensor) --

- 81. Obstacle avoiding ROBOT (using IR sensor) –
- 82. Artificial intelligence based Fire fighting ROBOT --
- 83. Voice Recognition based Robotic ARM control –
- 84. Smoke sensing ROBOT for industrial application –
- **85.** PC controlled wired ROBOT
- 86. PC controlled WIRELESSROBOT -
- 87. Wall follower (hugging ) ROBOT --
- 88. GSM controlled WIRELESSROBOT -
- 89. IR controlled ROBOTIC vehicle
- 90. Solar powered ROBOT with RF control –
- **91.** Clap sensing ROBOT—
- 92. Touch controlled wheel chair ROBOT for physical challenged-
- 93. Touch controller wired ROBOT -
- 94. Touch controlled WIRELESSROBOT Project Support
- 95. Touch controlled pick and place ROBOT –
- **96.** Wired joystick control ROBOT –
- 97. IR controlled ROBOT –
- 98. Metro train model to shuttle between stations and displaying station names –
- 99. RF / Android controlled ROBOT with laser and gun arrangement
- **100.** Industrial temperature monitoring ROBOT
- **101.** Wall painting ROBOT –
- 102. Automatic scrap collecting ROBOT
- **103.** Automatic vehicle light intensity control to avoid accident
- 104. Unmanned ground vehicle (UGV) for Army Surgical Operations
- **105.** Anti collision technique for trains using IR sensor
- **106.** Cell phone controlled solar vehicle

- 107. SMS controlled solar car limit less distance control
- **108.** Solar powered manual controlled ROBOT
- 109. RF based solar pick and place ROBOT for Industries
- 110. Specified color activated ROBOTIC vehicle for signaling system

