ADITYA COLLEGE OF ENGINEERING & TECHNOLOGY

Permanently Affiliated to JNTUK, Kakinada, Approved by AICTE, New Delhi
Recognized by UGC Under Section (2f) and 12(B) of UGC Act 1956
Aditya Nagar, ADB Road, Surampalem,533437
Department of Mechanical Engineering

Project Title:	Design and Fabrication of Solar Grass Cutter	
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Abstract	PO's Mapping	PSO's Mapping
A Solar grass cutter is a machine that uses sliding blades to cut a lawn at an even length. Even more sophisticated devices are there in every field. Power consumption becomes essential for future. Solar grass cutter is a very useful device which is very simple in construction. It is used to maintain and upkeep lawns in gardens, schools, college's etc. We have made some changes in the existing machine to make its application easier at reduced cost. Our main aim in pollution control is attained through this. Unskilled operation can operate easily and maintain the lawn very fine and uniform surface look. In our project, —Solar grass cutter‖ is used to cut the different grasses for the different application.	PO1, PO2, PO3, PO4, PO5, PO6, PO7,PO8 PO9,P010 PO11,PO12	PSO1, PSO2, PSO3

PO1: Engineering Knowledge	**PO5:** Modern Tool usage	**PO9:** Individual & Team Work
PO2: Problem Analysis	**PO6:** Engineer & Society	**PO10:** Communication Skills
PO3: Design & Development of solutions	**PO7:** Environment & Sustainability	**PO11:** Project Management & Finance
PO4: Investigations on complex problems	**PO8:** Ethics	**PO12:** Life Long Learning
PSO1: Mechanical Engineers must be able to analyze, design and evaluate mechanical components and systems using cutting-edge software tools as required by the industries from time to time.	**PSO2:**The ability to work in manufacturing and other sectors' operations and maintenance plants	**PSO3:**As part of a team or individually, plan and manage activities in micro, small, medium and large enterprises

Relevance to PO's and PSO's

PO1	Applied the subject knowledge in calculation for design and systems
PO2	Studied and analysed existing designs of SGC
PO3	Structure of the frame is designed under simulation.
PO4	students will be able to find a feasible solution for the problem designed
PO5	Solid works and Ansys workbench tools are used for design and simulation.
PO6	Design and development of SGC
PO7	students will be able to finds solutions for environmental safety
PO8	students will be able to apply ethical principles and commit to professional ethics
PO9	Fabrication of the SGC is done by the team collaboration
PO10	students will be able to communicate their work in reviews and paper presentations
PO11	students will be able to manage the financial constraints
P012	students will be able to apply the analyzing skills in their professional career
PSO1	Students will be able to implement the application of software pertaining to the problem statement.
PSO2	Maintenance of the SGC is done.
PSO3	Entrepreneur skills attained