**TITLE: WIND TURBINE**

NAME: A. KANNAIAH GUPTHA

ENTRY NUMBER: 2022MEB1292

**OBJECTIVE:** To make a efficient mechanical system for a wind turbine to generate electricity from the wind energy.

**SHORT DESCRIPTON ABOUT THE PROJECT:**I done this projectusing SolidWorks software. Now I am attaching my reference video: <https://www.youtube.com/watch?v=qrlC5EF2ab8&t=730s>.

First, I made base part by using extrude cut and extrude boss/base and then I made rotor part by using spine to draw its sketch and I used extruded cut to make holes in it to insert the blades. I created blades by using 4 planes in its sketch. By using lofted boss/base I have joined the geometry of each plane to get the required object. My fourth part is lower mast, I have used the revolve boss/base tool and extruded cut of the sketch to get my required object. Same as the lower mast I have created upper mast part by using the revolve boss/base. I made shaft using revolve boss/base and chamfering at the both of its end and I made a groove at one end. Washer part is so easy to do. I used extrude boss/base and chamfering to make this one. Now, housing part, I felt this is the most difficult part to make in this project. Take three planes and draw sketches and use lofted boss/base. I removed some unwanted parts by using extruded cut. By using shell I made its inner part to hollow. I also used extruded boss/base and revolve cut to get my required object. All my parts are ready and I have started assembly. First, I kept my base and then lower must and upper mast are coincided in it. After that, I added housing and rotor. I inserted blades in the rotor and I added shaft and washer in the housing. At last I done mirroring the housing part to complete my assembly. After that I done the animation and I created a drawing sheet on this. Newly, I have learnt this time drawing using spine mirroring the housing part, etc….