**1. INTRODUCTION:-**

Wind energy is the energy present in moving air. This energy can be utilized for more useful purposes like running a windmill, pumping water from a well, sailing boats, etc.

In the proposed work an attempt has been made to develop a windmill model by which wind energy can be used to charge mobiles. It utilizes a fan coupled to a generator and housed in a frame capable of rotating on its axis. It can be installed on a conical beam. As the wind blows, the fan rotates. The generator produces enough energy to charge a mobile.

It consists of minimum number of parts making it cheaper. Additional feature provided like a rechargeable battery at the bottom makes it more users friendly. When wind energy is present and we are not charging our mobiles this energy can be comfortably saved in the rechargeable battery and during the absence of wind in such situations this provides an alternate means to charge our mobiles.

**2. REVIEW OF EXISTING RELEVENT LITERATURE:-**

In August, 2014, the usage of renewable energy sources to maximum extent was what the common user tried to do in whatever applications possible. That project was also based on the fruitful utilization of wind power. The use of wind energy in such a way that it could charge any mobile phone or laptop. By considering such situation, one had all batteries drained off and could not find any plug point to charge it. So, at that time a person needed a source which could provide the charge. This can be also be done simply and more effectively with the help of a small size wind mill as our proposed project, which helps the requisite charge.

In November 2015, an attempt had been made to develop a small compact and easy to carry mobile charger which utilized wind energy to charge mobile phones with ease during travelling. It would minimize the dependability on conventional chargers. It utilized a fan connected to a DC generator, a bridge rectifier which would minimize fluctuations. It worked effectively between vehicle/wind speed of 40kmph and 80kmph. It could be easily installed in the window of the car/bus/train etc and mobile phone could be charged. The charger could be rotated on its axis to facilitate the direction of the wind. The charger consisted of some requisite number of parts.

**3. OBJECTIVE:-**

It provides an alternate source for power generation with the windmill which will replace the conventional energy sources like coal, petrol, etc. used to generate electricity which pollutes nature.

**4. METHODOLOGY:-**

**1) Welding** is a [typical example of normal fabrication](https://en.wikipedia.org/wiki/Fabrication_(metal)) or [sculptural](https://en.wikipedia.org/wiki/Welded_sculpture) [process](https://en.wikipedia.org/wiki/Process_(science)) that can join materials, usually [metals](https://en.wikipedia.org/wiki/Metal) or [thermoplastics](https://en.wikipedia.org/wiki/Thermoplastic), by causing [fusion](https://en.wikipedia.org/wiki/Fusion_welding), which is distinct from lower temperature metal-joining techniques such as [brazing](https://en.wikipedia.org/wiki/Brazing) and [soldering](https://en.wikipedia.org/wiki/Soldering), which do not [melt](https://en.wikipedia.org/wiki/Melting) the base metal. In addition to melting the base metal, a filler material is typically added to the joint to form a pool of molten material (the [weld pool](https://en.wikipedia.org/wiki/Weld_pool)) that cools to form a joint that is usually stronger than the base material. [Pressure](https://en.wikipedia.org/wiki/Pressure) may also be used in conjunction with [heat](https://en.wikipedia.org/wiki/Heat), or by itself, to produce a weld.

**2) Soldering** is a process in which two or more items (usually metal) are joined together by melting and putting a filler metal (**solder**) into the joint, the filler metal having a lower melting point than the adjoining metal.

**5. TIME LINE:-**

a. Discussion about the idea: 22nd of July, 2017 to 27th of July, 2017.

b. Review of literature: 28th of July, 2017 to 7th of August, 2017.

b. Registration: 8th of August, 2017.

c. Acceptance of registration: 12th of August, 2017.

d. Procurement of the hardware components: 13th of August, 2017 to 17th of August, 2017.

e. Testing of the components: 18th of August, 2017 to 19th of August, 2017.

f. Rig up of circuit: 20th of August, 2017 to 23rd of August, 2017.

g. Testing of circuit: 24th of August, 2017 to 28th of August, 2017.

h. Synopsis Writing: 29th of August, 2017 to 3rd of August, 2017.

i. Synopsis submission for correction(s): 4th of August, 2017.

j. Final submission of synopsis: 14th of September, 2017.

**6. REFERENCES:-**

• Wikipedia

• https://teeic.indianaffairs.gov/er/wind/restech/uses/index.htm

• <https://energy.gov/eere/wind/advantages-and-challenges-wind-energy>

• Google search for Existing Relevant Literature:-

(1) <https://www.thingiverse.com/thing:944461>

(2) www.ijrame.com/vol3issue11/V3i1109.pdf

(3) inpressco.com/wp-content/uploads/2014/08/Paper1022831-2832.pdf