



## Department of Electrical Engineering

### One day Visit Report at “RGI 112.5kW Solar Plant”

Electrical Engineering Department, G.H.Raisonni Institute of Engineering and Technology, Nagpur organized one day Visit on 17/07/2019 for 5<sup>th</sup> semester Electrical department students at “RGI 112.5kW Solar Plant” which is installed at the roof of GHRAETN. The Visit was attended by 20 students. The whole Visit was conducted by Asst. Prof. D. U. Sarkar, Faculty, Electrical Engineering Department.

RGI 172.5KW solar power plant is divided into two parts one is G H Raisonni Academy of Engineering & Technology whose installed capacity is 112.5KW and another one is G H Raisonni polytechnic whose installed capacity is 60KW. The combination of both try to supply the whole campus but this generation is not sufficient to fulfill the power requirement of whole campus. Here Net metering system plays a very important role. In grid-connected Solar Photo-Voltaic (SPV) systems, solar energy is fed into the building loads that are connected to the public electricity grid through a service connection with surplus energy being fed into the grid and shortfall being drawn from the grid. Production of surplus energy may happen when solar energy produced exceeds building load energy demand.

The objectives of this Visit are to govern the knowledge of field work, learn the specification of Solar plant structure and also to learn & understand the calculation of Angles as well as installation parameters. In this visit first Overview of Solar Plant given by expert then Provide them the demo calculation to find out the solar angles practically. Students also get the knowledge of Using Compass to find out the true south & magnetic south direction.

