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-----**(57) Abstract :**

Solar technologies convert sunlight into electrical energy either through photovoltaic (PV) panels or through mirrors that concentrate solar radiation. This energy can be used to generate electricity or be stored in batteries or thermal storage. Sun is a renewable source of energy and is safe for the environment. About 4-7kWh/m² and 5x10¹⁵kWh/m solar energy falls in India in a day and in a year respectively. About 3.6×10²⁴ Joules/year total radiations are received by earth and environment. These solar panels are installed in an open atmosphere and subjected to the environment directly. This direct contact of solar panels towards the environment develops certain defects in solar photo-voltaic panels. These defects are degradation, discoloration of solar panels, deposition effects like bird deposition, dirt and dust deposits on panel surface, shading effects, fault in solar panel components etc. Inspection of solar panels improves the health condition as well as the overall performance of solar panels and improves power generation. - Shading of trees, bird deposits, cement deposits, and soiling are some of the environmental factors which cause reduction in power generation from solar panels in heat form. - Corrosion on the interconnecting joints of solar modules - Crack on a small part of glass surface - Soil deposition on the solar module surface - Discoloration of solar cell - Cracking of the complete glass Moisture over the cover of junction box

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