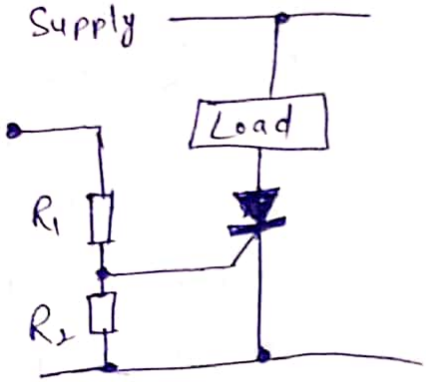
Qus-3: Write Short Note (1) Light Triggering - (2) gate Triggering (3) Led & Schottky diode

1) Light Triggering :- is the method to turn ON the SCR which is triggered by passing a beam of light of particular wavelength through the quartz window provided on the SCR. Out 3 terminals gate Anode and Cathode the SCR can be turned on whenever the anode is more positive than cathode voltage is more than the breakdown threshold voltage or forward blocking voltages) this method is usually not applied and instead a gating pulse is such a case the SCR turns on much quicker with low applied voltage. This is the one way of most common and economical ways of turning on SCR for high power application

(2) :- Gate Triggering :→ This form of SCR Triggering is the one that is most commonly seen in the different circuit used To turn on & and SCR a positive gate voltage between gate and cathode. This gives rise to a gate current when charges are injected into the inner P layer of the device.



(3) :→ LED :- A light emitting diode is a semiconductor light source that emits light when current flows through it. Electrons in the semiconductors recombine with electrons holes. releasing energy in the form of photons. (LED) is a semiconductor diode that emits light when an electric current is passed through it. Light is produced when the particles that carry the current (known as electrons and holes) combine together within the semiconductor material. Semi light is generated within the solid semiconductor material. Led are solid state diode. The Term 'Solid state lighting which also encompasses organic LED this lighting technology from other sources that use heated filaments (incandescent and tungsten halogen lamps) or gas discharges fluorescent lamps).

4) Schottkey diode :- A Schottkey diode is a metal semiconductor diode with a low forward voltage drop and a very fast switching speed. The Schottkey diode is another type of semiconductor diode but have the advantages that their forward voltage drop is substantially less than that of the conventional silicon PN-junction diode have many useful diode from rectification. Signal conducting and switching through to TTL and CMOS logic gates due mainly to their low power and fast switching speed. TTL 'Schottkey logic gates are identified by the letter LS offering PN Junction diode are formed by joining together a P-type and an N-Type semiconductor and when Reverse Based the depletion region is increased blocking current flow.