

R & RC FIRING CIRCUIT

AIM :

To study working of R & RC firing circuit

APPARATUS REQUIRED:

PROCEDURE:

- 1) MAKE THE CONNECTIONS AS GIVEN IN THE CIRCUIT DIAGRAM
- 2) Connect R-Load resistor between the load points
- 3) Vary the control pot and observe the voltage waveforms across load, SCR and at different points of the circuit
- 4) Measure the load voltage across load using multimeter and tabulate the readings.
- 5) We can vary the firing angle from 0° to 90° only in R triggering
- 6) In this triggering the synchronized firing angle can be obtained easily and economically in the positive half cycle of the supply
- 7) But there is a drawback that the firing angle can be controlled at the most at 90° . Because the gate current is in phase with the applied voltage
- 8) A resistor is connected in series with the control pot, so that the gate current does not cross the maximum possible value I_{gmax}
- 9) Draw the wave form across the load and device for different values of firing angle.

SINGLE PHASE PARALLEL INVERTER (PARALLEL INVERTER:-30V/2A)

AIM: to study working of parallel inverter

APPARATUS REQUIRED:

PROCEDURE:

- 1) switch on the firing circuit. Observe the trigger outputs T_p and T_n by varying frequency potentiometer and by operating ON/OFF switch
- 2) Then connect input DC