AIM OF THE EXPERIMENT (2)

Study and use of single beam dual trace CRO to view waveforms and measure its amplitude & frequency.

EQUIPMENTS REQUIRED

1. CRO
2. Function generator(FG)
3. TPS
4. AC mill voltmeter/Digital multi meter

PROCEDURE

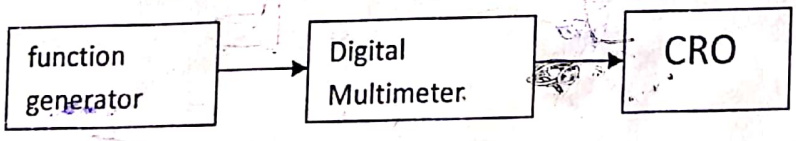
1. **Measurement of frequency:-**
   Connect the function generator to CRO vertical I/P terminal (Y1/CH-1). set FG to frequency 1KHz and calculate the frequency from CRO. Similarly calculate the frequency of 2KHz & 5KHz etc.

2. **Measurements of Voltage:-**
   Set the AC voltage from FG i.e. 1vrms and measure the voltage from CRO . similarly measure 2V,4V & 5Vetc.

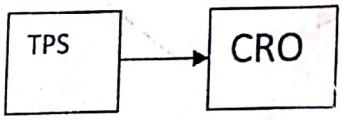
3. **Measurement of D.C. voltage:-**
   Set the TPS voltage i.e. 10V,20V & 30V etc. and measure the voltage from CRO.

BLOCK DIAGRAM:-

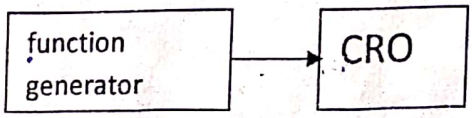
AC voltage measurement



DC voltage measurement



Frequency measurement



TABULATION

Measurement of frequency

Sl no.	Input frequency from AFG in Hz/KHz	No. of division inX-axis = a	Time/div (b)	Total time=(a*b)	F=1/T In Hz/KHz	% of error

Measurement of A.C. Voltage

Sl no.	AC voltage from FG in Volts.	No. of division in Y-axis = a	Volt/div= b in volts	Peak to peak voltage= (a*b)in volts	RMS volt. $V_0/2\sqrt{2}$	% of error

Measurement of D.C. Voltage

Sl. no.	Input voltage from TPS in volts.	No. of division in Y-axis = a	Volt/div= (b)	Total voltage = (a *b)	% of error