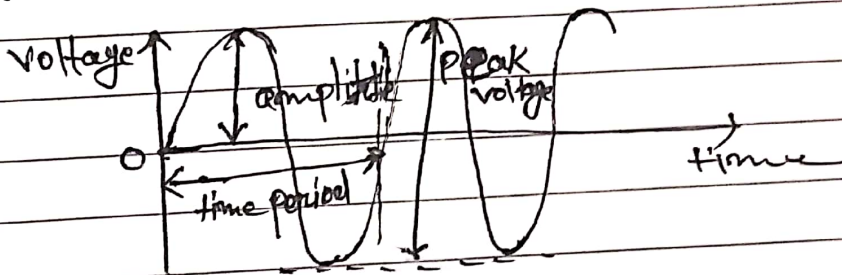


Date
5/02/2024

B.Sc
Part-II

The CRO used to measure various electrical quantities such as voltage, current and frequency. The electron beam is directed at a phosphor-coated screen to produce a visual representation of the electrical signal. To measure a specific electrical quantity, the CRO is connected in parallel or series with the circuit under test and the voltage or current waveform is displayed on the screen. By analyzing the waveform, the CRO can provide accurate reading of various electrical quantities such as ~~peak~~ peak voltage, frequency and phase.

⇒ Calculation of Amplitude. → The voltage signal is displayed on the screen as if



it was a time function. The signal's amplitude is consistent, but using the volt/division button on top of the CRO board. We can adjust how many divisions are used to conceal the voltage signal in a vertical direction. So using the method below, we can measure the signal's amplitude as it appears on the CRO screen.

$$A = j \times nV \quad \text{where, } A = \text{Amplitude of the signal.}$$

$j = 15$ is the voltage/division value

and $n_v =$ no of partition partition that
comes the displayed sign in
vertical axis.

h.