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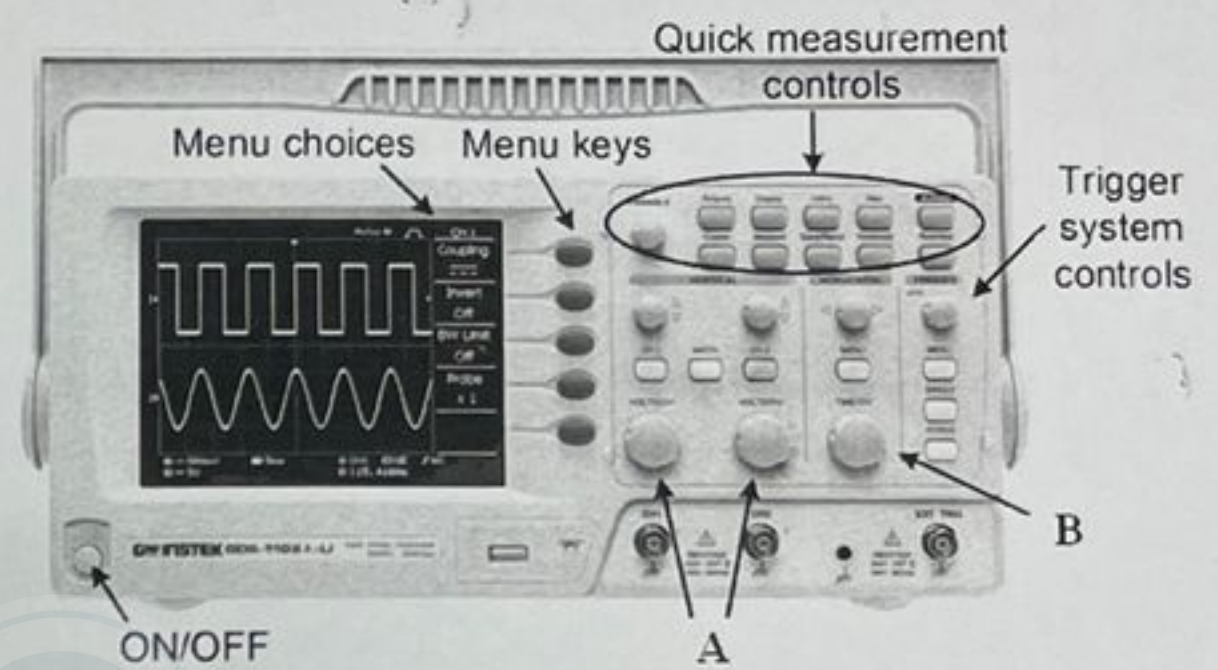
Q1) For the instrument shown in the figure below, answer the following questions:

a) What is the name of the device shown in the figure??

b) State the function of knobs

A _____

B _____



Q2) true or false

The function of the oscilloscope is to draw V/f graph

A capacitor is a passive electrical component that can store energy as an electric field.

An inductor is a passive electrical component that resists changes in electric current passing through it..

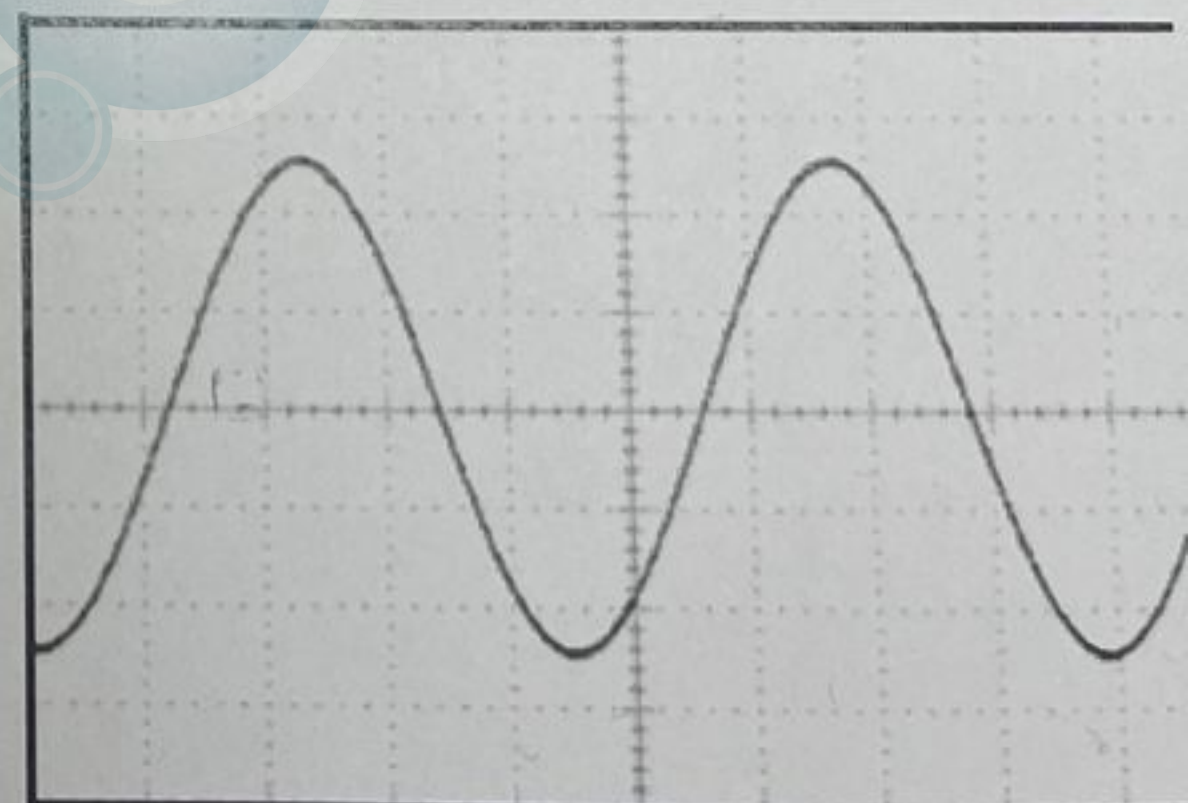
Q3) For the signal shown in scope screen, given the volt/div= 2 v, time/Div=2 ms

V_{pp} = _____

V_{rms} = _____

Period = _____

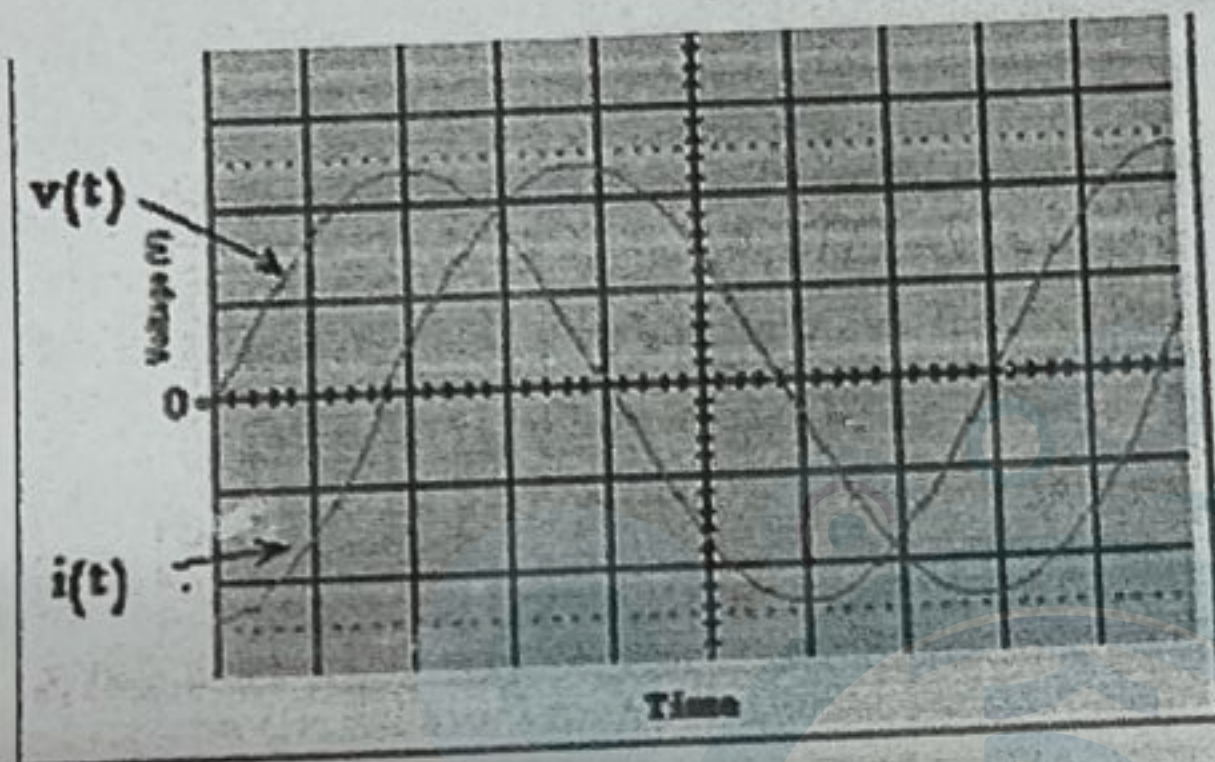
Frequency = _____



Student name:

student ID:

for the figure shown below, if $V/DIV = 2V$, and the measurement are carried out at 250Hz, then answer the following questions:

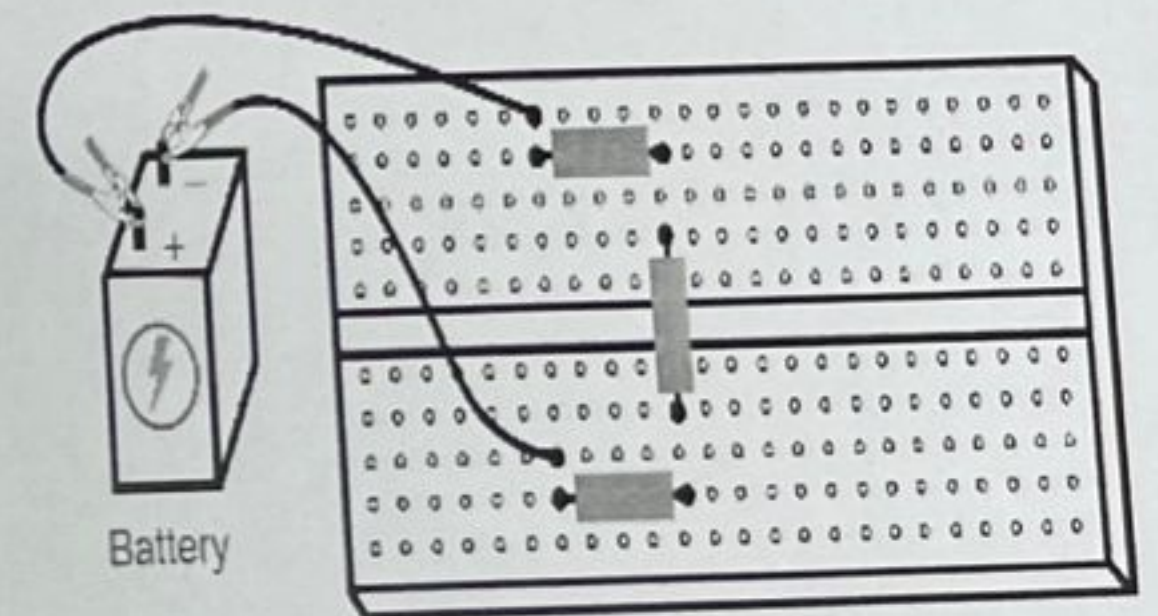


- The time period of the $v(t)$ is
- The time division of the oscilloscope is set to:
- $I_{peak-peak} =$
- $V_{peak} =$
- $V_{rms} =$
- $i(t)$ (leads, lags, in phase) $v(t)$ by

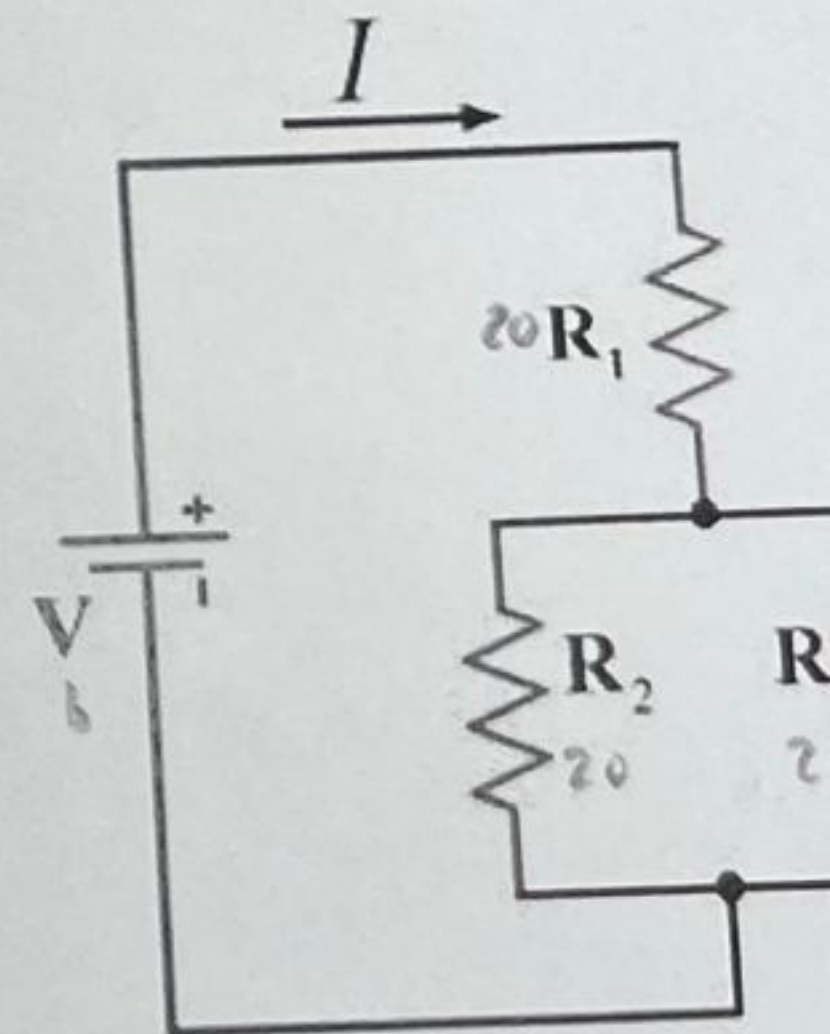
1- What does a 6.8 k ohm with 10 % tolerance resistor look like?

Color	Digit	Multiplier	Tolerance (%)
Black	0	10^0 (1)	
Brown	1	10^1	1
Red	2	10^2	2
Orange	3	10^3	
Yellow	4	10^4	
Green	5	10^5	0.5
Blue	6	10^6	0.25
Violet	7	10^7	0.1
Grey	8	10^8	
White	9	10^9	
Gold		10^{-1}	5
Silver		10^{-2}	10
(none)			20

2- For the following breadboard connection draw the schematic diagram of connected circuit.



3. For the following circuit find I given that $R_1=R_2=R_3=20\ \Omega$ and $V=6\text{ Volt}$



4) what is the condition to get maximum power transfer to the load?

5) Is power a linear quantity or non – linear quantity ? why?