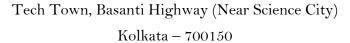


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PROBLEM SPECIMEN

FOR

CIRCUIT QUIZ

Section A

- 1. The statement "The total current flowing through a particular resistor is equal to the current in a loop, containing the internal resistance of the circuit and the resistor in series" is the:
- a. Norton's Theorem
- b. Thevenin's Theorem
- c. Kirchoff's law
- d. Both a and c

Ans=b

- 2. When will maximum current flow in a RLC series circuit, given R=30 ohm, L=0.1 H and C=0.01 uF.
- a. For f=5000Hz
- b. For f=5032Hz
- c. For f=5500Hz
- d. For f=6000Hz

Ans=b

Use f=1/(2*pi*L*C)

- 3. For what type of current will a Capacitive circuit conduct?
- a. For alternating current
- b. For direct current
- c. Both a and b
- d. None of these

Ans=c

Since any capacitive circuit conducts for both AC and DC (Transient Behavior).

Section B

Problem statement

1. Taking a 50 Hz 10V a.c. supply double the voltage across a resistor.

Items to be used

- a. 1 nos. 10 K Resistor
- b. 1 nos. 1 uF capacitor
- c. 10V 50Hz power supply
- d. Oscilloscope to verify data.

Ans: Connect a and b in parallel, and then the whole set in series with the power supply. Plug the oscilloscope to the common node of a and b.

