

## Chapter 2 - Questions

Q1 Explain in your own words what is a capacitor.

**A capacitor is an electronic device that stores electrical energy in an electric field by accumulating electric charges on two closely spaced surfaces that are insulated from each other. It is a passive electronic component with two terminals.**

Q2 Explain in your own words what is an inductor.

**An inductor, also called a coil, choke, or reactor, is a passive two-terminal electrical component that stores energy in a magnetic field when electric current flows through it. An inductor typically consists of an insulated wire wound into a coil.**

Q3 What does uF stand for?

**Micro Farads**

Q4 What are inductors measured in?

**Henrys**

Q5 Why is back emf from a large coil inductor dangerous?

**When the power to large inductors or coils is turned off, the field around the inductor collapses causing a large voltage in the opposite direction. This back voltage can be dangerous and is called Back EMF.**

Q6 What is the term when a capacitor and inductor oscillate at their frequency?

**Resonant Frequency**

Q7 Draw a series tuned circuit. (**Series circuit, the signal has only one path.**)



Q8 Draw a parallel tuned circuit. (**A circuit can be identified as “parallel” if the signal has to split at some point and go down two or more paths.**)

