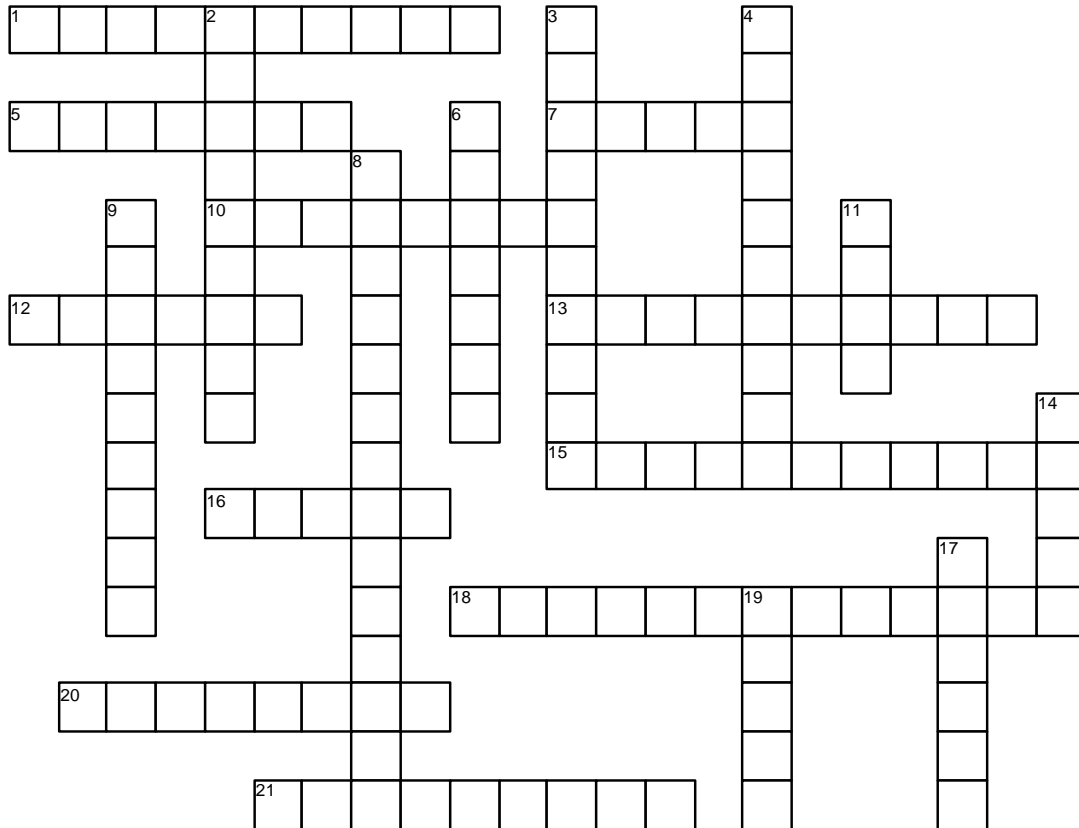


Electronic Fundamentals

Chapter 45



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ACROSS

- 1 A _____ is a specially constructed diode designed to operate with a reverse-bias current.
- 5 _____ is an example of a semiconductor.
- 7 _____ material is produced by doping silicon or germanium with the element boron or the element indium.
- 10 An _____ is an electronic circuit that changes DC into AC.
- 12 _____ means to operate an electronic device, such as a computer, for a period from several hours to several days.
- 13 A _____ (in a circuit) is a semiconductor device that can act as an electrical switch, act as an amplifier, or regulate current.
- 15 Another name for a clamping diode is a _____ diode.
- 16 A _____ is an electrical one-way check valve made by combining a P-type material and an N-type material.
- 18 A diode connected across the terminals of a coil to control voltage spikes is called a _____.
- 20 The point where the two types of materials join in a diode is called the _____.
- 21 Another name for a clamping diode is a _____ diode.

DOWN

- 2 A _____ bridge is a group of diodes that is used to change an AC circuit into a DC circuit.
- 3 The doping elements are called _____; therefore, after their addition, the germanium and silicon are no longer considered pure elements.
- 4 A _____ is a semiconductor material such as silicon, that has been doped to provide a given resistance.
- 6 The negative electrode of a diode is called the _____.
- 8 _____ are materials that contain exactly four electrons in the outer orbit of their atom structure and are, therefore, neither good conductors nor good insulators.
- 9 _____ is an example of a semiconductor.
- 11 The _____ is in the center and the voltage applied to the _____ is used to control current through a transistor.
- 14 The positive electrode of a diode is called the _____.
- 17 When another material is added to a semiconductor material in very small amounts, it is called _____.
- 19 _____ material is silicon or germanium that is doped with an element such as phosphorus, arsenic, or antimony, each having five electrons in its outer orbit.