

Q.1 A circuit element may be defined as a two terminal electrical device which ____ into other two terminal.

- A. can be subdivided
- B. cannot be subdivided
- C. can be divided
- D. cannot be divided

Q.2 what are the circuit elements?

- A. resistor
- B. inductor and capacitor
- C. voltage and current sources
- D. all of the above

Q.3 An interconnection of circuit elements is called a ____

- A. node
- B. branch
- C. circuit or network
- D. mesh

Q.4 The term circuit is used to describe a ____ and the term network more often refers to ____ elements configuration.

- A. simple configuration; complicated
- B. complicated configuration; simple
- C. simple configuration; simple and complicated
- D. simple and complicated configuration; simple

Q.5 A point in a circuit where the terminals of two or more elements are connected together is called ____

- A. branch
- B. node
- C. network
- D. closed path

Q.6 when three or more elements are connected at a node, then that node is called a

- A. junction
- B. essential node
- C. principal node
- D. all of the above

Q.7 Any path which contains no other paths is called

- A. closed path
- B. mesh
- C. branch
- D. loop

Q.8 what is branch?

- A. It has two terminals
- B. Is a part of the circuit which extends from one principal node to another.
- C. may contain one element or several elements in series
- D. all of the above

Q.9 which of the following is/are correct of closed path?

- A. any path along various branches of the circuit which finishes at the point where it started
- B. It is not necessary that closed path is made up of closed sequence of connected elements
- C. The path can jump from any node to other
- D. all of the above

Q.10 A path which contains more than two meshes is called____

- A. loop
- B. closed path
- C. network
- D. mesh

Q.11 which of the following is true?

- A. a loop contains mesh but a mesh does not contain a loop
- B. a loop contains mesh and a mesh also contain a loop
- C. a loop does not contains mesh but a mesh contain a loop
- D. a loop does not contains mesh and a mesh also does not contain a loop

Q.12 which of the following laws form the basis of all network analysis and are applicable to any network?

- A. Kirchhoff's laws
- B. Ohm's law
- C. Ampere's circuital law
- D. Maxwell's equation

Q.13 The polarity of the voltage source is ____ and ____ of the direction of current.

- A. not fixed; dependent on
- B. fixed; independent
- C. fixed; dependent
- D. not fixed; independent

Q.14 The positive terminal is at ____ and negative terminal at a ____

- A. lower potential; higher potential
- B. lower potential; lower potential
- C. higher potential; lower potential
- D. higher potential; higher potential

Q.15 A Kirchhoff's laws are applicable to

- A. linear elements
- B. non linear elements
- C. time varying or time invariant
- D. All of the above