**Circuit theory**

1. For a 3 phase load balanced condition, each phase has the same value of

a) Impedence

b) resistence

c) power factor

d) all of these

ans: d)

1. The graph of an electric network has N nodes and B branches . the number of links L with respect to the choice of a tree is given by
2. B-N+1
3. B+N
4. N-B+1
5. N-2B-1

Ans: c)

1. The resistance of series RLC circuit is doubled and inductance is halved then bandwidth becomes
2. No change
3. Half
4. Double
5. Four times

Ans: d)

1. A two terminal black box contains a series combination of a resistor and unknown two terminal linear device. As soon as the battery is connected to the black box the current is found to be zero , the device is
2. An inductor
3. A resistor
4. A diode
5. An unknown

Ans: a)

1. Kirchoff’s second law is based on law of conservation of

a)charge

b)energy

c)momentum

d)mass

ans: b)

1. Which of the following cannot be connected in series unless they are identical

a) voltage source

b) current source

c)both a) and c)

d) resistance

ans) b)

1. In what connection we get neutral
2. star
3. delta
4. mesh
5. both a) and b)

ans: a)

1. a network is linear if
2. response propotional to excitation function
3. principle of superposition applies
4. principle of homogeneity applies
5. both b and c

ans: d)

1. superposition theorem is applicable to networks having
2. linear elements
3. non linear elements
4. dependent current source
5. transformer

ans: a)

1. clamping circuits are one which inserts

a)ac component in signal

b)dc component in signal

c)both ac and dc

d)none of these

ans: b)

1. The size comparison between base , emitter and collector is

a)base>collector>emitter

b)emitter>collector>base

c)collector>emitter>base

d)all are equal

ans: c)

1. A transistor act as a
2. Voltage source and a current source
3. Current source and a resistor
4. Diode and current source
5. Diode and power supply

Ans: c)

DIGITAL ELECTRONICS

1) Which of the following is a digital device

a) regulator of a fan

b) microphone

c)resistance of a material

d) light switch

ans: d)

2) temperature variation is a/an

a) digital quantity

b)analog quantity

c)either digital or analog quantity

d)none

ans: b)

3)which of the following is not a transmission medium

a)telephone lines

b)coaxial cables

c)Modem

d) microwave systems

ans: c)

4) the time required for the Gate to change its output is called as

a) decay time

b)start time

c)run time

d) propagation time

ans: d)

5) combinations that are not listed for input variables are

a)overflow

b)carry

c)borrow

d)don’t care

ans: d)

6) a device which converts bcd to seven segments is called

a)encoder

b)decoder

c)multiplexer

d)none of these

ans: b)