

## Important Basic Electrical MCQs

In this post, some of the important Basic Electrical mcqs are given. It includes reciprocal of resistivity, unit of conductivity, unit of conductance, ohm's law, semiconductor at low temperature, resistivity of semiconductor material, temperature co-efficient of pure metal, temperature co-efficient of metal alloy, heating material, valance electrons in conductor, valance electrons in semiconductor, resistance of electrolyte, unit of temperature co-efficient of resistance and zero resistivity materials.

### Basic Electrical MCQs 41 to 45

- 41 The reciprocal of resistivity is known as
- ( a ) Conductance
  - ( b ) Conductivity
  - ( c ) Resistivity
  - ( d ) Permeability

Correct Answer ( b ): Conductivity

- 42 The unit of conductivity is
- ( a ) Siemens / meter
  - ( b ) Siemens
  - ( c ) 1 / Siemens

( d )Ohm - meter

Correct Answer ( a ): Siemens / meter

43 The unit of conductance is

( a )Ohm

( b )Siemens

( c )Ohm <sup>-1</sup>

( d )Both ( b ) and ( c )

Correct Answer ( d ): Both ( b ) and ( c )

44 Which of the following relation is true?

( a )V = IR

( b )I = VR

( c )R = VI

( d )V = I<sup>2</sup>R

Correct Answer ( a ): V = IR

45 Ohm's law is not applicable to

( a )Non - metallic

( b )Silicon carbide

( c )Metal

( d )Both ( a ) and ( b )

Correct Answer ( d ): Both ( a ) and ( b )

#### Basic Electrical MCQs 46 to 50

46 Which of the following must be constant for ohm's law?

( a )Pressure

- ( b )Velocity
- ( c )Temperature
- ( d )Voltage

Correct Answer ( c ): Temperature

- 47 The semiconductor material at very low temperature acts as
- ( a )Conductor
  - ( b )Insulator
  - ( c )Super conductor
  - ( d )None of the above

Correct Answer ( b ): Insulator

- 48 The free electrons in the insulator material are
- ( a )Zero
  - ( b )One hundred
  - ( c ) $1.6 \times 10^{19}$
  - ( d )One thousand

Correct Answer ( a ): Zero

- 49 The resistivity of pure semiconductor material is in the range of
- ( a ) $10^{-13} \Omega - m$
  - ( b ) $10^{-12} \Omega - m$
  - ( c ) $1 \Omega - m$
  - ( d )Zero

Correct Answer ( c ):  $1 \Omega - m$

- 50 The temperature co - efficient of pure metal is
- ( a )Positive

- ( b )Negative
- ( c )Zero
- ( d )Any of the above

Correct Answer ( a ): Positive

#### Basic Electrical MCQs 51 to 55

51 The resistance of copper material becomes zero at temperature of

- ( a )0°C
- ( b )28°C
- ( c )– 234.5°C
- ( d )– 234.5°F

Correct Answer ( c ): – 234.5°C

52 The temperature coefficient of alloy material is

- ( a )Zero
- ( b )Small positive
- ( c )Negative
- ( d )Positive

Correct Answer ( b ): Small positive

53 Which of the following material is used for making heating elements?

- ( a )Copper
- ( b )Aluminium
- ( c )Metal alloys
- ( d )Nickel

Correct Answer ( c ): Metal alloys

54 The valance electrons in the conductor material are

- ( a )4
- ( b )< 4
- ( c )> 4
- ( d )Zero

Correct Answer ( b ): < 4

55 The valance electrons in the semiconductor materials are

- ( a )< 4
- ( b )4
- ( c )> 4
- ( d )Zero

Correct Answer ( b ): 4

#### Basic Electrical MCQs 56 to 60

56 The resistance of the electrolyte \_\_\_\_\_ with increase in the temperature.

- ( a )Increases
- ( b )Decreases
- ( c )Does not affect
- ( d )Any of the above

Correct Answer ( b ): Decreases

57 The temperature coefficient of semiconductor material is

- ( a )Positive
- ( b )Negative

( c )Zero

( d )Any of the above

Correct Answer ( b ): Negative

58 As the temperature increases, the resistance of the \_\_\_\_\_ increases irregular and small.

( a )Pure metal

( b )Alloys

( c )Insulator

( d )Semiconductor

Correct Answer ( b ): Alloys

59 The unit of temperature coefficient of resistance is

( a ) $\Omega / m$

( b ) $1 / ^\circ C$

( c ) $\Omega / ^\circ C$

( d )Mho /  $^\circ C$

Correct Answer ( b ):  $1 / ^\circ C$

60 Which of the following materials have zero resistivity?

( a )Conductors

( b )Semiconductors

( c )Insulators

( d )Super conductors

Correct Answer ( d ): Super conductors