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1: The process of emission of electrons from hot metal surface is called

1. electronic emission
- 2. thermionic emission**
3. electron capture
4. proton loss

2: The particles emitted from hot cathode surface are

1. negative ions
2. positive ions
3. protons
- 4. electrons**

3: The cathode rays carry

1. positive charge
2. neutral
- 3. negative charge**
4. positrons

4: At room temperature, the electron cannot escape metal surface due to

- 1. attractive forces of nucleus**
2. repulsive forces of electrons
3. repulsive forces of nucleus
4. pulling force of protons

5. The ripple factor of a power supply is ...

- a) diode rating
- b) filter efficiency
- c) power output**
- d) voltage regulation

6. LED stands for ...

- a) light energy display
- b) light emitting display
- c) light emitting detector
- d) light emitting diode**

7. The multimeter is an instrument that measure

- a) resistance
- b) voltage
- c) current
- d) all of these**

Answer - Click Here:

D

8. When the temperature of the semi-conductor is increased, the conductivity will ...

- a) decreases**
- b) increases
- c) same every time
- d) all of the above

9. Electrons emitted from hot metal surfaces is a process of ...

- a) static emission of electrons
- b) current emission of electrons
- c) thermionic emission of electrons**
- d) all of these

10. Common transistor has three leads named as

- a) common emitter bias
- b) emitter collector case

c) **collector base emitter**

d) none of these

11. The function of zener diode is ...

a) current amplifier

b) voltage amplifier

c) **regulators**

d) all of these

12. DSC means ...

a) digital server ommitter

b) **digital storage oscilloscope**

c) device storage ommitter

d) none of these

13. The total number of electrons in an atom is termed as ...

a) atomic radius

b) atomic weight

c) atomic size

d) **atomic number**

1. Define electron emission.

The process by which free electrons are emitted from the metal surface is called electron emission.

2. Define work function.

The amount of external energy required to remove an electron from the metal is called work function.

3. Work function is measured in

Joules

4. List different types of electron emission.

The different methods to emit free electrons from the metal surface include:

1. Electric field electron emission
2. Thermionic emission
3. Photoelectric emission
4. Secondary emission

5. Define thermionic emission.

The process by which free electrons are emitted from the metal surface when external heat energy is supplied is called thermionic emission.

6. Define thermions.

The free electrons which are escaped from the metal surface under the application of heat energy are called thermions.

7. Define threshold temperature.

The minimum temperature at which the metal starts emitting the free electrons is called threshold temperature.

8. Define electric field electron emission.

The process by which free electrons are emitted from the metal surface when strong electric field is applied is called electric field electron emission.

9. Define photoelectric emission.

The process by which free electrons are emitted from the metal surface when light energy is supplied is called photoelectric emission.

10. Define secondary electron emission.

The secondary electron emission is the electron emission which occurs when high speed primary electrons hits the free electrons in the metal.