

ECAT Pre General Science Physics Chapter 13 Current Electricity

Sr	Questions	Answers Choice
1	The flux through a closed surface depends upon:	<p>A. Shape of geometry of the closed surface</p> <p>B. Charge enclosed</p> <p>C. Nature of the medium</p> <p>D. Both (A) and (B)</p> <p>E. Both (B) and (C)</p>
2	The number of field lines passing through unit area held perpendicular to the field lines represent:	<p>A. Flux in that region</p> <p>B. Intensity of the field</p> <p>C. Charge</p> <p>D. Area of the region</p> <p>E. None of these</p>
3	SI unit of current describes the flow of charge at the rate of	<p>A. One ampere per second</p> <p>B. One coulomb per second</p> <p>C. One electron per second</p> <p>D. 6.25×10^{18} electrons per second</p> <p>E. Both B and D</p>
4	The inkjet printer ejects a thin stream of:	<p>A. Water</p> <p>B. Oil</p> <p>C. Ink</p> <p>D. Any of above</p>

E.

None of these

5 If the ends of a wire are connected to a battery an electric field E will be set up at:

A.

The ends of the wire only

B.

Mid points of the wire only

C.

Every point within the wire

D.

At nodes only

E.

Both (B) and (D)

6 Heating effect of current utilized in:

A.

Electric motor

B.

Electric toaster

C.

Electroplating

D.

Electric kettle

E.

Both (B) and (D)

7 Electrostatics is the branch of physics which deals with the study of electro charges:

A.

At rest

B.

At rest under the action of electric forces

C.

In motion under the action of electric forces

D.

In motion

E.

At rest under the action of nuclear forces

8 An eV is unit of:

A.

Potential

B.

Energy

C.

Energy

size:12.0pt;line-height:107%;font-family: "Times New Roman";"serif";mso-fareast-font-family:"Times New Roman";mso-fareast-theme-font: minor-fareast">Work<o:p></o:p></p>

D. <p class="MsoNormal">Power</p>

E. <p class="MsoNormal">Both (B) and(C)<o:p></o:p></p>

9 Most practical application of electricity involve

A. <p class="MsoNormal" style="text-align:justify">Charges at the rest<o:p></o:p></p>

B. <p class="MsoNormal" style="text-align:justify">Charges in the motion<o:p></o:p></p>

C. <p class="MsoNormal" style="text-align:justify">Electrons at rest<o:p></o:p></p>

D. <p class="MsoNormal" style="text-align:justify">Atoms in motion<o:p></o:p></p>

E. <p class="MsoNormal" style="text-align:justify">Molecules in motion<o:p></o:p></p>

10 Gaussian surface is always:

A. <p class="MsoNormal">Rectangular<o:p></o:p></p>

B. <p class="MsoNormal">Spherical<o:p></o:p></p>

C. <p class="MsoNormal">Cylindrical<o:p></o:p></p>

D. <p class="MsoNormal">Box shape<o:p></o:p></p>

E. <p class="MsoNormal">Any of these<o:p></o:p></p>

11 When a constant potential difference is applied across the conductor, the drift velocity of electrons:

A. <p class="MsoNormal" style="text-align:justify">Increases<o:p></o:p></p>

B. <p class="MsoNormal" style="text-align:justify">Decreases<o:p></o:p></p>

C. <p class="MsoNormal" style="text-align:justify">Remains the constant<o:p></o:p></p>

D. <p class="MsoNormal" style="text-align:justify">Either of these<o:p></o:p></p>

E. None of these

12 The surface density of charge is defined as:

- A. Charge per volume
- B. Mass per volume
- C. Charge per area
- D. Mass per area
- E. Both (B) and (C)

13 Selenium is:

- A. An insulator
- B. A conductor
- C. Insulator in the dark and becomes conductor when exposed to light
- D. Conductor in the dark only
- E. None of these

14 When a constant potential difference is applied across the conductor, the drift velocity of electrons:

- A. Increases
- B. Decreases
- C. Remains the constant
- D. Either of these
- E. None of these

A. Zero

