

Physics ECAT Pre Engineering Chapter 13 Current Electricity Online Test

Sr	Questions	Answers Choice
1	Static electricity is produced by the transfer of	<p>A. <p class="MsoNormal">Electrons<o:p></o:p></p></p> <p>B. <p class="MsoNormal">Protons<o:p></o:p></p></p> <p>C. <p class="MsoNormal">One fluid<o:p></o:p></p></p> <p>D. <p class="MsoNormal">Two fluids<o:p></o:p></p></p> <p>E. <p class="MsoNormal">None of these<o:p></o:p></p></p>
2	Electrostatics is the branch of physics which deals with the study of electro charges:	<p>A. <p class="MsoNormal">At rest<o:p></o:p></p></p> <p>B. <p class="MsoNormal">At rest under the action of electric forces<o:p></o:p></p></p> <p>C. <p class="MsoNormal">In motion under the action of electric forces<o:p></o:p></p></p> <p>D. <p class="MsoNormal">In motion<o:p></o:p></p></p> <p>E. <p class="MsoNormal">At rest under the action of nuclear forces<o:p></o:p></p></p>
3	In case of two identical charges placed certain distance apart, the electric field lines are:	<p>A. <p class="MsoNormal">Straight lines<o:p></o:p></p></p> <p>B. <p class="MsoNormal">Sine curves<o:p></o:p></p></p> <p>C. <p class="MsoNormal">Curved<o:p></o:p></p></p> <p>D. <p class="MsoNormal">Both (A) and (B)<o:p></o:p></p></p>

- 4 Field lines are closer to each other in the region where the field is:
- E. <p class= MsoNormal >None of these<o:p></o:p></p>
- A. <p class="MsoNormal">Stronger<o:p></o:p></p>
- B. <p class="MsoNormal">Weaker<o:p></o:p></p>
- C. <p class="MsoNormal">Much weaker<o:p></o:p></p>
- D. <p class="MsoNormal">Absent<o:p></o:p></p>
- E. <p class="MsoNormal">None of these<o:p></o:p></p>
- 5 Electric field lines emerge from the charge in:
- A. <p class="MsoNormal">One dimension<o:p></o:p></p>
- B. <p class="MsoNormal">Two dimensions<o:p></o:p></p>
- C. <p class="MsoNormal">Three dimensions<o:p></o:p></p>
- D. <p class="MsoNormal">Four dimensions<o:p></o:p></p>
- E. <p class="MsoNormal">None of them<o:p></o:p></p>
- 6 The value of relative permittivity of different dielectrics are:
- A. <p class="MsoNormal">Equal</p>
- B. <p class="MsoNormal">Different</p>
- C. <p class="MsoNormal">Greater than one</p>
- D. <p class="MsoNormal">Smaller than one</p>
- E. <p class="MsoNormal">Both (B) and (C)</p>
- 7 A current of 1 ampere is passing through a conductor. The charge passing through it in half a minute s
- A. One coulomb
- B. 0.5 coulomb
- C. 30 coulombs
- D. 2 coulombs
- E. None of these
- 8 The conventional current is the name given to current due to flow of
- A. Positrons
- B. Positive charges
- C. Negative charges
- D. Both A and C
- E. None of these
- 9 In case of metallic conductors, the charge carriers are
- A. Protons
- B. Electrons
- C. Antiprotons

- 10 The charge carriers in an electrolyte are
A. Positive ions
B. Negative ions
C. Either A or B
D. Both A and B
E. Neither A nor B
- 11 In case of metallic conductors, the charge carriers are
A. Protons
B. Electrons
C. Antiprotons
D. Positrons
E. Both A and B
- 12 SI unit of current describes the flow of charge at the rate of
A. One ampere per second
B. One coulomb per second
C. One electron per second
D. 6.25×10^{18} electrons per second
E. Both B and D
- 13 The current that flows through the coil of a motor causes
A. Its shaft to revolve
B. Its brushes to rotate
C. Motor to move
D. Its shaft to rotate
E. None of these
- 14 Most practical applications of electricity involve
A. Charges at rest
B. Charges in motion
C. Electrons at rest
D. Atoms in motion
E. Molecules in motion
- 15 Which of the following substances has got positive temperature coefficient of resistance?
A. Carbon
B. Germanium
C. Silicon
D. Aluminium
E. None of these
- 16 A thermistor is a resistor which is:
A. Light Sensitive
B. Heat Sensitive
C. Sound Sensitive
D. All of these
E. None of these
- 17 Thermistors are prepared under
A. High pressure and low temperature
B. High pressure and high temperature
C. Low pressure and low temperature
D. Low pressure and high temperature
E. None of these
- 18 The emf is measured in:
A. Newton
B. Volt
C. J/C
D. Both A and B
E. Both B and C
- 19 The quantity having the same unit as that of emf is:
A. Force
B. Energy
C. Potential
D. Current
E. Charge
- 20 Which instrument is expensive and difficult to use?
A. Voltmeter
B. Potentiometer
C. CRO
D. Both A and C
E. Both A and B
- 21 An ideal voltmeter has:
A. Zero resistance
B. Small resistance
C. Large resistance
D. Infinite resistance
E. Both A and B
- 22 Kirchhoff's first rule is also called:
A. Loop rule
B. Thumb rule
C. Point rule
D. Right hand rule
E. None of these
- 23 The third band of the colour code:
A. Gives the number of zeroes
B. Is decimal multiplier
C. Gives the resistance tolerance
D. Gives the third digit
E. Both (A) and (B)
- 24 As variable resistor
B. As potential divider

- 24 A rheostat can be used:
C. For varying the current
D. All of these
E. None of these
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- 25 The best conductor is:
A. Silver
B. Copper
C. Aluminum
D. Both B and C
E. None of them
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- 26 As the current flows through the wire
A. It generates heat in the wire
B. It produces sound in the wire
C. Resistance of the wire decrease
D. Voltage across the ends is increased
E. None of these
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- 27 The fourth band is a:
A. Silver band
B. Red band
C. Gold band
D. Either A or C
E. Either A or B
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- 28 The value of resistivity is the least for:
A. Copper
B. Aluminum
C. Silver
D. Tungsten
E. Iron
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- 29 In a metal, the valence electrons are:
A. Attached to individual atoms
B. Not attached to individual atoms
C. Free to move within the metal
D. Both A and B
E. Both A and C
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- 30 In gases, the charge carriers are:
A. Electrons
B. Positive ions
C. Negative ions
D. Both A and C
E. Both A and B