

ECAT Pre General Science Online Test

Sr	Questions	Answers Choice
1	The word amorphous means:	A. Without any structure B. With definite structure C. Regular arrangement of molecules D. Both (B) and (C) E. None of these
2	The force which maintain the strict long-range order between atoms of a crystalline solid is the:	A. Nuclear force B. Cohesive force C. Adhesive force D. Coulomb force E. None of these
3	The transition from solid state to liquid state is:	A. Abrupt B. Slow C. Continuous D. Discontinuous E. Both (A) and (D)
4	The transition from solid to liquid is actually from:	A. Order to disorder B. Disorder to order C. Order to order D. Disorder to disorder E. None of these
5	Each atom in a metal crystal vibrates about a fixed point with an amplitude that:	A. Decrease the rise in temprature B. Is not affected by rise in temprature C. Increase with rise in temprature D. Both (B) and (C) E. None of these
6	Zirconia is classified as:	A. Ceramic solid B. Ionic compound C. Metal D. Either (A) or (B) E. Either (B) or (C)
7	The solids are classified as:	A. Metals B. Crystalline C. Amorphous D. Polymeric E. All except (A)
8	Crystalline solids are in the form of:	A. Metals B. Ionic Compounds C. Ceramics D. Both (A) and (B) E. All of these
9	The basic circuit element in D.C. circuit is:	A. A capacitor B. A resistor C. An inductor D. Both (A) and (C) E. Both (A) and (B)
10	The basic circuit element in A.C. circuits are:	A. Resistor and capacitor B. Resistor and Inductor C. Capacitor only D. Both (B) and (C) E. None of these
11	Unless stated otherwise, when we speak of A.C. meter reading, we usually mean:	A. Peak value B. RMS value C. Instantaneous value D. Peak-to-peak value E. Both (A) and (C)
12	The length of rotating vector (on a certain scale) represents the:	A. Peak value of alternating quantity B. RMS value of alternating quantity C. Instantaneous value of alternating quantity D. Either (B) or (C) E. Either (A) or (B)
13	A sinusoidally alternating voltage or current can be graphically represented by a:	A. Vector B. Rotating vector C. Clockwise vector D. Anticlockwise vector

		D. Anticlockwise voltage vector E. None of these
14	If 250V is the RMS value of alternative voltage, then its peak value V_0 will be:	A. 353.5V B. 250V C. 175V D. zero E. 400V
15	If we connect a A.C. volt meter to read A.C. voltage, It would read its:	A. RMS value B. Instantaneous value C. Valued average over a cycle D. Zero E. Both (B) and (C)
16	The phase at the positive peak of an A.C. cycle is:	A. 0 B. 90 C. 180 D. 0 E. $\frac{1}{2}$ and $\frac{3}{2}$
17	The alternative voltage of current is actually measured by:	A. Its RMS value B. Square root of its mean square value C. Instantaneous value D. Peak value E. Both (A) and (B)
18	The magnitude of alternative voltage V:	A. Always increase B. Always decrease C. Remains constant D. Does not remain constant E. None of these
19	If we connected the ordinary DC ammeter to measure alternating current, it would measure its:	A. Instantaneous value B. RMS value C. Value averaged over a cycle D. Either (B) or (C) E. Either (A) or (C)
20	The RMS value of alternating current is:	A. 0.7 times at the peak value B. 0.5 times the peak value C. 0.7 times the Instantaneous value D. Equal to maximum voltage E. None of these
		A. The same as its RMS value

21	The Instantaneous value of alternative current maybe:	A. The same as its RMS value B. Greater than its RMS value C. The same as its peak value D. Any of these E. None of these
22	Peak value of alternative current is:	A. one of its Instantaneous value B. Equal to its RMS value C. The same as its peak-to-peak value D. Both (B) and (C) E. None of these
23	The sum of positive and negative peak values is called:	A. Instantaneous value B. Peak value C. Rms value D. Peak-to peak-value E. None of these
24	The highest value reached by the voltage or current:	A. In quarter cycle is called Instantaneous value B. In half cycle is called peak-to-peak value C. In one cycle is called peak value D. In half cycle is called Instantaneous value E. None of these
25	The entire wave form of sinusoidal voltage is actually a set of all the:	A. Positive maximum value + V_{m} and negative maximum value - V_{m} B. Positive maximum value + V_{m} and zero C. Zero and negative maximum value - V_{m} D. Any of these E. None of these
26	The waveform of alternating voltage is a:	A. Square B. Rectangular C. Saw-tooth D. Sinusoidal E. None of these
27	The wave form of alternating voltage is the graph between:	A. Voltage across X-axis and time across y-axis B. Current and time C. Voltage along y-axis and time along x-axis D. Voltage and current E. Either (B) or (D)
28	The most common source of alternating voltage is:	A. Motor B. Transformer C. AC generator D. Both (A) and (C) E. Both (A) and (B)
29	The time interval during which the Voltage source changes its polarity once is known as:	A. Time period T B. Half the time period C. Quarter the time period D. Two third of the time period E. None of these
30	Nowadays, Most of the electric energy is produced by the A.C. generators using:	A. Hydal water B. Geothermal energy C. Solar energy D. Biomass E. Both (B) and (D)
31	Alternating current is produced by a voltage source which polarity:	A. Remains the same B. Reverse after period T C. Keeps on reversing with time D. Reverse after every time interval T/2 E. Both (C) and (D)
32	Alternating current can be transmitted:	A. To long distance B. At very high cost C. At very low cost D. Both (A) and (C) E. Both (A) and (B)
33	The direction of induced current is always so as to oppose the cause which produces it. This is	A. Lenz's law B. Ampere's law C. Faraday's law D. Coulomb's law E. None of these
34	Faraday's law of electromagnetic induction has been used in the construction of:	A. Galvanometer B. Voltmeter C. Electric motor D. Electric generator E. Commutator
35	The law of electromagnetic induction is related to:	A. Coulomb B. Ampere C. Faraday

35	The law of electromagnetic induction is related to:	C. Faraday D. Lenz E. None of these
36	The rate change of area expressed is expressed in:	A. None of these B. ms^{-1} C. m^2/s D. ms^{-2} E. m^2/s^{-1}
37	Plan of a coil makes an angle of 20° with the lines of magnetic field. The angle between B and vector area of plane of coil is:	A. Also 20° B. 70° C. 90° D. 180° E. None of these
38	A square loop of wire is moving through a uniform magnetic field. The normal to the loop is oriented parallel to the magnetic field. The emf induced in the loop is:	A. Zero B. Of smaller magnitude C. Of larger magnitude D. Sometimes B, sometimes C E. Neither of these
39	A metal rod of length 1m is moving at a speed of 1 ms^{-1} in a direction making angle of 30° with 0.5 T magnetic field. The emf produced in the rod is:	A. 0.25 N B. 0.25 V C. 2.5 V D. 2.5 N E. 25 V
40	Motional emf is called motional:	A. Electromagnetic force and is measured in newtons B. Electromotive force and is measured in volt C. Electromotive force and is measured in newtons D. Electromagnetic force and is measured in volts E. None of these
41	When the conductor moved across a magnetic field:	A. Emf induced is similar to that of a battery B. Emf induced gives rise to induced current C. An emf induced across its ends D. All are correct E. None of these
42	A coil of constant area is placed in a constant magnetic field. An induced current is produced in the coil when:	A. The coil is destroyed B. The coil is Rotated C. The coil is neither destroyed nor rotated

	current is produced in the coil when:	D. Both (A) and (B) E. None of these
43	The magnitude of induced emf depends upon the:	A. Rate of decrease of magnetic field B. Rate of change of magnetic field C. Rate of increase of magnetic flux D. Constancy of magnetic field E. None of these
44	In magnet-coil experiment, emf can be produced by:	A. Keeping the coil stationary and moving the magnet B. Keeping the magnet stationary and moving the coil C. Relative motion of the loop and magnet D. Any one of above E. All above
45	The induced current in the loop can be increased by:	A. Using a stronger magnetic field B. Moving the loop faster C. Replacing the loop by a coil of many turns D. All above E. Both (A) and (B)
46	The induced current in a conductor depends upon:	A. Resistance of the loop B. Speed with which the conductor moves C. Any of these D. Both (A) and (B) E. None of these
47	The phenomenon of generation of induced emf is called	A. Electrostatic induction B. Magnetic induction C. Electromagnetic induction D. Electric induction E. Both (A) and (D)
48	An induced current can be produced by:	A. Constant magnetic field B. Changing magnetic field C. Varying magnetic field D. Constant electric field E. None of these
49	An emf is set up in a conductor when it:	A. is kept in a magnetic field B. is kept in a electric field C. Move across a magnetic field D. Both (A) and (B) E. None of these
50	The current produced by moving a loop of a wire across a magnetic field is called:	A. Direct current B. Magnetic current C. Alternating current D. Induced current E. None of these
51	When the charged particle is projected at right angles to the field, then experienced by it will be:	A. Maximum B. Zero C. qvB D. Both (A) and (B) E. Both (A) and (C)
52	A long wire wound tightly on a cylindrical core is called:	A. Potentiometer B. Solenoid C. Toroid D. Wheat and stone bridge E. None of these
53	Magnetic flux passing through the an element of area A placed perpendicular to a uniform magnetic field B is:	A. Maximum B. Minimum C. Zero D. Very small E. None of these
54	Magnetic flux passing through a element whose vector area makes an angle θ with lines of magnetic force is:	A. $BA \cos \theta$ B. Zero C. BA D. $BA \sin \theta$ E. None of these
	At a given instant a electron moves in the direction in a region where there is	A. -y direction B. +y direction

55	At a given instant, a proton moves in +x direction in a region where there magnetic field in -z direction. The magnetic force on the proton will be the:	C. +z direction D. -z direction E. None of these
56	NmA^{-1} is commonly called:	A. Weber B. Apmere C. Guass D. Coulomb E. None of these
57	Strength of magnetic field is measured in SI units, in:	A. N B. N/Am C. Am/N D. Nm/A E. None of these
58	The permeability of free space is measured in:	A. Wb/Am B. Wb A/m C. Am/Wb D. m/Web A E. None of these
59	If the number of turns of a solenoid (carrying a steady current I) is doubled without changing the length of a solenoid, then magnetic field:	A. Becomes Half B. Becomes double C. Is not affected D. Becomes one fourth E. None of these
60	The magnetic field inside a solenoid can be increased by:	A. Increasing n B. Decreasing I C. Increasing I D. By using iron core within solenoid E. All correct except (B)
61	Total number of turns on 0.15 m length solenoid is 300. the value of n is:	A. Greater than 300 B. Smaller than 300 C. Equal to 300 D. Any of (A) or (B) E. Any of (A) or(C)
62	Hold the solenoid in the right hand with fingers curling in the direction of current. The direction of the field will be given by:	A. class="MsoNormal" style="text-align:justify"> Thumb<o:p></o:p></p> B. class="MsoNormal" style="text-align:justify"> Curled fingers<o:p></o:p></p> C. class="MsoNormal" style="text-align:justify"> Middle finger<o:p></o:p></p> D. class="MsoNormal" style="text-align:justify"> Arm of right hand<o:p></o:p></p> E. class="MsoNormal" style="text-align:justify"> None of these<o:p></o:p></p>
63	In the formula $B = \mu_0 nI$, the symbol n denotes:	A. class="MsoNormal" style="text-align:justify"> Total number of turns of solenoid<o:p></o:p></p> B. class="MsoNormal" style="text-align:justify"> Number of turns per unit length<o:p></o:p></p> C. class="MsoNormal" style="text-align:justify"> Number of turns per unit volume<o:p></o:p></p> D. class="MsoNormal" style="text-align:justify"> Numbers of turns per unit area<o:p></o:p></p> E. class="MsoNormal" style="text-align:justify"> Number of<o:p></o:p></p>

64 A field is uniform and much stronger:

- A.

Inside a long solenoid<o:p></o:p></p>

B.

Outside a long solenoid<o:p></o:p></p>

C.

At the end of a long solenoid<o:p></o:p></p>

D.

At the central point of long solenoid<o:p></o:p></p>

E.

None of these<o:p></o:p></p>

65 A solenoid is a coil of wire which is:

- A.

Short, loosely wound, cylindrical<o:p></o:p></p>

B.

Long, tightly wound, spherical<o:p></o:p></p>

C.

Long, loosely wound, cylindrical<o:p></o:p></p>

D.

Long, tightly wound, cylindrical<o:p></o:p></p>

E.

None of these<o:p></o:p></p>

66 Amperean path is a:

- A.

Closed path<o:p></o:p></p>

B.

Rectangular path<o:p></o:p></p>

C.

Circular path<o:p></o:p></p>

D.

Any of above<o:p></o:p></p>

E.

Broken path<o:p></o:p></p>

- A.

Ampere's law<o:p></o:p></p>

B.

Faraday's law<o:p></o:p></p>

C.

<span style="font-size: 12.0pt; line-height: 107%;font-family:"Times New

family:", Times New Roman", ", ", serif" Lenz's law<o:p></o:p></p>
D. <p class="MsoNormal" style="text-align:justify"><span style="font-size:12.0pt; line-height:107%;font-family:", Times New Roman", ", ", serif" Newton's law<o:p></o:p></p>
E. <p class="MsoNormal" style="text-align:justify"><span style="font-size:12.0pt; line-height:107%;font-family:", Times New Roman", ", ", serif" Coulomb's law<o:p></o:p></p>

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if the field is directed along the normal to the area, then flux is:

A. <p class="MsoNormal" style="text-align:justify"><span style="font-size:12.0pt; line-height:107%;font-family:", Times New Roman", ", ", serif" Maximum<o:p></o:p></p>
B. <p class="MsoNormal" style="text-align:justify"><span style="font-size:12.0pt; line-height:107%;font-family:", Times New Roman", ", ", serif" Equal to zero<o:p></o:p></p>
C. <p class="MsoNormal" style="text-align:justify"><span style="font-size:12.0pt; line-height:107%;font-family:", Times New Roman", ", ", serif" Equal to BA<o:p></o:p></p>
D. <p class="MsoNormal" style="text-align:justify"><span style="font-size:12.0pt; line-height:107%;font-family:", Times New Roman", ", ", serif" Minimum<o:p></o:p></p>
E. <p class="MsoNormal" style="text-align:justify">Both (A) and (C)<o:p></o:p></p>

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the current is pass through the straight wire. The magnetic field established around it has its lines of force:

A. <p class="MsoNormal" style="text-align:justify">Circular and endless<o:p></o:p></p>
B. <p class="MsoNormal" style="text-align:justify"><span style="font-size:12.0pt; line-height:107%;font-family:", Times New Roman", ", ", serif" Oval in shape and endless<o:p></o:p></p>
C. <p class="MsoNormal" style="text-align:justify"><span style="font-size:12.0pt; line-height:107%;font-family:", Times New Roman", ", ", serif" Straight<o:p></o:p></p>
D. <p class="MsoNormal" style="text-align:justify"><span style="font-size:12.0pt; line-height:107%;font-family:", Times New Roman", ", ", serif" Parabolic<o:p></o:p></p>
E. All are true

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Magnetic lines of force:

A. <p class="MsoNormal" style="text-align:justify">Cannot intersect at all<o:p></o:p></p>
B. <p class="MsoNormal" style="text-align:justify"><span style="font-size:12.0pt; line-height:107%;font-family:", Times New Roman", ", ", serif" Intersect at infinity<o:p></o:p></p>
C. <p class="MsoNormal" style="text-align:justify"><span style="font-size:12.0pt; line-height:107%;font-family:", Times New Roman", ", ", serif" Intersect within magnet<o:p></o:p></p>
D. <p class="MsoNormal" style="text-align:justify"><span style="font-size:12.0pt; line-height:107%;font-family:", Times New Roman", ", ", serif" Intersect at Neutral Point<o:p></o:p></p>
E. None of these

A. <p class="MsoNormal" style="text-align:justify">Vector quantity<o:p></o:p></p>
B. <n class="MsoNormal" style="text-align:justify">

71	magnetic field is a:	Scalar quantity Scalar as well as scalar quantity Any of (A) or (B) Neither (A) nor (B)
72	The pointer of a magnetic compass:	Is affected only by permanent magnets Aligns itself parallel to the applied magnetic field Vibrates in the magnetic field of the current Aligns itself perpendicular to the magnetic field Both (C) and (D)
73	It is customary represent a current flowing towards the reader by a symbol	+ -
74	A current carrying conductor sets up its own:	Electric field Nuclear field Magnetic field Both (A) and (C) All of these
75	In the region surrounding a current carrying wire:	A magnetic field is setup The lines of force are elliptical Direction of lines of

		forces depends upon direction of current D. Point the direction of N-S (A) and (C) E. All of these A. Point in the direction of E-W B. None of these E. Point in direction of S-E
76	When some compass needles are placed on a card board along a circle with the center at the wire, they will	A. Set themselves tangential to the circle C. Point in the direction of E-W D. None of these E. Point in direction of S-E
77	Electrolysis is the study of conduction of electricity through:	A. Solids B. Liquids C. Gases D. Plasma
78	Two dissimilar metals joined at their ends kept at constant temperature constitute:	A. Cell B. Voltmeter C. Thermocouple D. Potentiometer E. None of these
79	The magnitude of chemical Effects depends upon:	A. Nature of liquid B. Quantity of Electricity passed through the liquid C. Color of the liquid D. Both (A) and (C) E. Both (A) and (B) A. In electric motor B.

family:"Times New Roman","serif"]>To detect current<o:p></o:p></p>
 C. <p class="MsoNormal" style="text-align:justify">
 To measure current<o:p></o:p></p>
 D. <p class="MsoNormal" style="text-align:justify">
 All of these<o:p></o:p></p>
 E. <p class="MsoNormal" style="text-align:justify">
 None of these<o:p></o:p></p>

A. <p class="MsoNormal" style="text-align:justify">
 Value of current passing<o:p></o:p></p>
 B. <p class="MsoNormal" style="text-align:justify">
 Distance from the current element<o:p></o:p></p>
 C. <p class="MsoNormal" style="text-align:justify">
 Color of the material<o:p></o:p></p>
 D. <p class="MsoNormal" style="text-align:justify">
 Both (A) and (B)<o:p></o:p></p>
 E. <p class="MsoNormal" style="text-align:justify">
 Both (B) and (C)<o:p></o:p></p>

A. <p class="MsoNormal" style="text-align:justify">
 Always accompanied<o:p></o:p></p>
 B. <p class="MsoNormal" style="text-align:justify">
 Sometimes accompanied<o:p></o:p></p>
 C. <p class="MsoNormal" style="text-align:justify">
 Never accompanied<o:p></o:p></p>
 D. Any of above<p class="MsoNormal" style="font-size: 12.0pt; line-height: 107%;font-family:"Times New Roman","serif"]><o:p></o:p></p>
 E. <p class="MsoNormal" style="text-align:justify">
 None of these<o:p></o:p></p>

A. <p class="MsoNormal" style="text-align:justify">
 Always accompanied<o:p></o:p></p>
 B. <p class="MsoNormal" style="text-align:justify">
 Sometimes accompanied<o:p></o:p></p>
 C. <p class="MsoNormal" style="text-align:justify">
 Never accompanied<o:p></o:p></p>
 D. Any of above<p class="MsoNormal" style="font-size: 12.0pt; line-height: 107%;font-family:"Times New Roman","serif"]><o:p></o:p></p>

		style="text-align:justify"><o:p></o:p></p> E. <p class="MsoNormal" style="text-align:justify">None of these<o:p></o:p></p>
84	Heating effect of current utilized in:	A. <p class="MsoNormal" style="text-align:justify">Electric motor<o:p></o:p></p> B. <p class="MsoNormal" style="text-align:justify">Electric toaster<o:p></o:p></p> C. <p class="MsoNormal" style="text-align:justify">Electroplating<o:p></o:p></p> D. <p class="MsoNormal" style="text-align:justify">Electric kettle<o:p></o:p></p> E. <p class="MsoNormal" style="text-align:justify">Both (B) and (D)<o:p></o:p></p>
85	As the current flow through the wire:	A. <p class="MsoNormal" style="text-align:justify">It generates heat in the wire<o:p></o:p></p> B. <p class="MsoNormal" style="text-align:justify">It produces sound in the wire<o:p></o:p></p> C. <p class="MsoNormal" style="text-align:justify">Resistance of the wire decreases<o:p></o:p></p> D. <p class="MsoNormal" style="text-align:justify">Voltage across the ends is increased<o:p></o:p></p> E. None of these
86	The obvious effect/s of current is/are:	A. <p class="MsoNormal" style="text-align:justify">Heating effect<o:p></o:p></p> B. <p class="MsoNormal" style="text-align:justify">Magnetic effect<o:p></o:p></p> C. <p class="MsoNormal" style="text-align:justify">Chemical effect<o:p></o:p></p> D. <p class="MsoNormal" style="text-align:justify">Both (C) and (B)<o:p></o:p></p> E. <p class="MsoNormal" style="text-align:justify">All of these</p>
		A. <p class="MsoNormal" style="text-align:justify">Decreasing from zero to maximum<o:p></o:p></p> B. <p class="MsoNormal" style="text-align:justify"><span style="font-size:12.0pt; line-height:107%;font-

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When two spherical conducting balls at different potentials are joined by metallic wire, the current starts:

family:"Times New Roman","serif"";>Increasing from zero to maximum<o:p></o:p></p>
 C. <p class="MsoNormal" style="text-align:justify">Decreasing from maximum to zero<o:p></o:p></p>
 D. <p class="MsoNormal" style="text-align:justify">Increasing from maximum to zero<o:p></o:p></p>
 E. Both (A) and (D)<p class="MsoNormal" style="text-align:justify"><o:p></o:p></p>

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The device which can convert heat energy into electrical energy is called:

A. <p class="MsoNormal" style="text-align:justify">Thermistor<o:p></o:p></p>
 B. <p class="MsoNormal" style="text-align:justify">Thermometer<o:p></o:p></p>
 C. <p class="MsoNormal" style="text-align:justify">Thermostat<o:p></o:p></p>
 D. <p class="MsoNormal" style="text-align:justify">Thermocouple<o:p></o:p></p>
 E. <p class="MsoNormal" style="text-align:justify">Both (C) and (D)<o:p></o:p></p>

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Conversion of chemical energy to electrical energy can be achieved by:

A. <p class="MsoNormal" style="text-align:justify">Primary cell<o:p></o:p></p>
 B. <p class="MsoNormal" style="text-align:justify">Secondary cell<o:p></o:p></p>
 C. <p class="MsoNormal" style="text-align:justify">Both (A) and (B)<o:p></o:p></p>
 D. <p class="MsoNormal" style="text-align:justify">Photovoltaic cell<o:p></o:p></p>
 E. <p class="MsoNormal" style="text-align:justify">Solar cell<o:p></o:p></p>

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The example/s of non-electrical energy to electrical is/are:

A. <p class="MsoNormal" style="text-align:justify">Chemical energy<o:p></o:p></p>
 B. <p class="MsoNormal" style="text-align:justify">Mechanical energy<o:p></o:p></p>
 C. <p class="MsoNormal" style="text-align:justify">Heat energy<o:p></o:p></p>
 D. <p class="MsoNormal" style="text-align:justify"><o:p></o:p></p>

		Both (A) and (B) </p> E. <p class="MsoNormal" style="text-align:justify"> All of these</p>
91	When two spherical conducting balls at different potentials are joined by a metallic wire, after some time:	A. <p class="MsoNormal" style="text-align:justify"> Both the conductors are at the same potential</p> B. <p class="MsoNormal" style="text-align:justify"> Potential difference across the conductors remain constant</p> C. <p class="MsoNormal" style="text-align:justify"> Potential difference across the conductors becomes zero</p> D. <p class="MsoNormal" style="text-align:justify"> Both (A) and (B) </p> E. <p class="MsoNormal" style="text-align:justify"> Both (A) and (C)</p>
92	When two spherical conducting balls at different potentials are joined by a metallic wire, after some time:	A. <p class="MsoNormal" style="text-align:justify"> Both the conductors are at the same potential</p> B. <p class="MsoNormal" style="text-align:justify"> Potential difference across the conductors remain constant</p> C. <p class="MsoNormal" style="text-align:justify"> Potential difference across the conductors becomes zero</p> D. <p class="MsoNormal" style="text-align:justify"> Both (A) and (B) </p> E. <p class="MsoNormal" style="text-align:justify"> Both (A) and (C)</p>
93	In order to have a constant current through wire, the potential difference across its end should:	A. <p class="MsoNormal" style="text-align:justify"> Be zero</p> B. <p class="MsoNormal" style="text-align:justify"> Be maintained constant</p> C. <p class="MsoNormal" style="text-align:justify"> Goes on increasing</p> D. <p class="MsoNormal" style="text-align:justify"> Go on decreasing</p> E. <p class="MsoNormal" style="text-align:justify"> Both (A) and (B) </p>

94 An electric field is generated along the wire when:

- A. >Its resistance is very high
- B. >A constant potential is maintained across the wire
- C. >Net current through the wire is zero
- D. >A constant potential difference is maintained across the wire
- E. >Either (A) or (D)

95 The effects of bends in a wire on its electrical resistance are:

- A. >Zero
- B. >Much larger
- C. >Larger
- D. >Smaller
- E. >None of these

96 When resistance of a current carrying wire increases due to rise in temperature, the drift velocity of electrons:

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

- A. >Increases
- B. >Decreases
- C. >Increases

When a constant potential difference is applied across the conductor, the drift

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

family: "Times New Roman"; serif;">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. <p class="MsoNormal" style="text-align:justify">None of these<o:p></o:p></p>

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. <p class="MsoNormal" style="text-align:justify">None of these<o:p></o:p></p>

The term drift velocity is used when the ends of a wire are:

A. <p class="MsoNormal" style="text-align:justify">Connected to a laser source<o:p></o:p></p>
B. <p class="MsoNormal" style="text-align:justify">Connected to a voltage source<o:p></o:p></p>
C. <p class="MsoNormal" style="text-align:justify">Not connected to a voltage source<o:p></o:p></p>
D. <p class="MsoNormal" style="text-align:justify">At different values of potential<o:p></o:p></p>
E. <p class="MsoNormal" style="text-align:justify">Both (B) and (D)<o:p></o:p></p>

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

A. <p class="MsoNormal" style="text-align:justify">The ends of the wire only<o:p></o:p></p>
B. <p class="MsoNormal" style="text-align:justify">Mid points of the wire only<o:p></o:p></p>
C. <p class="MsoNormal" style="text-align:justify">Every point within the wire<o:p></o:p></p>
D. <p class="MsoNormal" style="text-align:justify">At nodes only<o:p></o:p></p>
E. <p class="MsoNormal" style="text-align:justify">Both (B) and (D)<o:p></o:p></p>

