

## ECAT Physics Online Test

Sr	Questions	Answers Choice
1	The work is stored in the inductor as	A. Electric potential energy B. Elastic potential energy C. Magnetic energy D. Absolute potential energy
2	.Depletion region contains:	A. Protons B. Positive ions C. Negative ions D. Both (B) and (C) E. Both (A) and (C)
3	Self induced e.m.f. is also called	A. Motional e.m.f. B. Thermistor C. Electrostatic induction D. Back e.m.f
4	A potential barrier of 0.7V exists across p-n junction made from:	A. Germanium B. Silicon C. Arsenic D. Gallium E. Indium
5	The ratio of average e.m.f in the coil to the time rate of change of current in the same coil is called	A. Mutual induction B. Mutual inductance C. Capacitance D. Self inductance
6	Depletion region contains:	A. Protons B. Positive ions C. Negative ions D. Both (B) and (C) E. Both (A) and (C)
7	Lenz's law deals with the	A. Magnitude of induced current B. Magnitude of induced e.m.f C. Direction of induced e.m.f D. Direction of induced current
8	The motional e.m.f depends upon the	A. Length of a conductor B. Strength of a magnet C. Speed of the conductor D. All of the above
9	Back emf is produced due to	A. Self induction B. Mutual induction C. A.C D. Lenz's law
10	The SI unit of magnetic induction is	A. Weber B. Weber/meter C. Henry D. Tesla
11	Computer chips are made from:	A. Iron B. Silicon C. Helium D. Stontium E. Aluminium
12	Transformer is used to	A. Increase alternating current B. Increase d.c voltage C. Increase & Decrease emf D. All answers are right
13	Lenz's law is the consequence of	A. Mass B. Energy conservation C. Momentum conservation D. Charge
14	The change of magnetic flux through a circuit will produce	A. Magnetic Field B. Electric Field C. emf D. a.c

15	Whenever a covalent bond breaks, it creates:	A. An electron B. A hole C. An electron-hole pair D. A positron E. All of these
16	Which of the following substances has got positive temperature coefficient of resistance?	A. Carbon B. Germanium C. Silicon D. Aluminium E. None of these
17	A thermistor is a resistor which is:	A. Light Sensitive B. Heat Sensitive C. Sound Sensitive D. All of these E. None of these
18	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
19	The emf is measured in:	A. Newton B. Volt C. J/C D. Both A and B E. Both B and C
20	The quantity having the same unit as that of emf is:	A. Force B. Energy C. Potential D. Current E. Charge
21	Which instrument is expensive and difficult to use?	A. Voltmeter B. Potentiometer C. CRO D. Both A and C E. Both A and B
22	An ideal voltmeter has:	A. Zero resistance B. Small resistance C. Large resistance D. Infinite resistance E. Both A and B
23	Kirchhoff's first rule is also called:	A. Loop rule B. Thumb rule C. Point rule D. Right hand rule E. None of these
24	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)
25	A rheostat can be used:	A. As variable resistor B. As potential divider C. For varying the current D. All of these E. None of these
26	The best conductor is:	A. Silver B. Copper C. Aluminium D. Both B and C E. None of them
27	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 the increase E. None of these
28	The fourth band is a:	A. Silver band B. Red band C. Gold band D. Either A or C E. Either A or B
29	The value of resistivity is the least for	A. Copper B. Aluminium C. Silver

29 The value of resistivity is the least for:

- C. Silver
- D. Tungsten
- E. Iron

30 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