

Physics ECAT Pre Engineering MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	A fuse wire is having 5 ampere current rating. What is the peak value of current it can have?	A. 0.7074 A B. 7.07 A C. 0.0707 A D. 7.707 A
2	dimensions are the same for:	A. Work and energy B. Force and weight C. None of these D. Both a and b
3	In stationary waves	A. Energy is uniformly distributed B. Energy is minimum at nodes and maximum at antinodes C. Energy is maximum at nodes and minimum at antinodes D. Alternating maximum and minimum energy producing at nodes and antinodes
4	An L-R circuit has $R = 10 \Omega$ and $L = 2 \text{ H}$. If 120 V, 60 Hz A.C. voltage is applied, then current in the circuit will be	A. 0.32 A B. 0.16 A C. 0.48 A D. 0.80 A
5	The definite number of significant figures in 5000 is:	A. Four B. Three C. Two D. One
6	One joule is equal to	A. $1.6 \times 10^{19} \text{ eV}$ B. $6.25 \times 10^{18} \text{ eV}$ C. $1.6 \times 10^{18} \text{ eV}$ D. $6.25 \times 10^{19} \text{ eV}$
7	Absolute zero is considered as that temperature at which:	A. All liquid become gases B. All gases become liquid C. Water freezes D. None of these
8	If the object is situated at focus of a convex lens, then its image is formed at:	A. F B. 2F C. Infinity D. None of these
9	Three quarks make:	A. An electron B. A meson C. A baryon D. A photon E. None of these
10	The number of all the protons and neutrons in a nucleus is known as	A. atomic number B. mass number C. charge number D. none of these
11	A high concentration of red blood cells increases its viscosity from	A. 3 - 5 times that of mercury B. 5 - 8 times that of mercury C. 3 - 5 times that of water D. 5 - 8 times that of water
12	The SI unit of electric field intensity is	A. CN^{-1} B. NC^{-1} or Vm^{-1} C. JC^{-1} D. AV^{-1}
13	The lines of a diffraction grating have a spacing of 1.2 m. When a beam of monochromatic light is incident normally on the grating. The first order maximum monochromatic light is.	A. 1200 nano meters B. 450 meters C. 600 nano meters D. 700 nano meters
		A. Also 20

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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. 70°
B. 90°
C. 90°
D. 180°
E. None of these

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If the distance between two charges is doubled, the force between them will become:

A. Double
B. Half
C. One third
D. One fourth

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A ball is dropped vertically down and it takes time t to reach the ground. At time $t/2$

A. The ball had covered exactly half the distance
B. The velocity of the ball was $V/3$ where V is the velocity when it reached the ground
C. The ball had covered less than half the distance
D. The ball had covered more than half the distance

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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

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If current through conductor is 1 A and length of conductor is 1 m placed at right angle to the magnetic field, then the strength of magnetic field is

A. $F = B^2$
B. $F = 0$
C. $F = B$
D. $F = B/2$

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When a body moves with a constant speed in a circle:

A. No work is done on it
B. No acceleration is produced in the body
C. Velocity remains constant
D. None of these

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For the virtual image, option _____ is not correct:

A. $1/p = 1/f - 1/q$
B. $1/f = 1/p - 1/q$
C. $1/p = 1/p - 1/f$
D. $1/p = 1/f + 1/q$