

Physics ECAT Pre Engineering MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	The reciprocal of decay constant λ of a radioactive material is:	A. Frequency B. Half life C. Year D. Mean life E. None of these
2	A metal plate of thickness half the separation between the capacitor plates of capacitance C is inserted. The new capacitance is	A. C B. C/2 C. Zero D. 2C
3	In case of an ideal gas, the P.E associated with its molecule is	A. maximum B. zero C. minimum D. not fixed
4	Unit of impulse in	A. Newton B. Kg m C. Kg m/s D. Joule
5	The total energy of spring mass system is	A. zero B. changing with time C. constant D. none of them
6	The fourth band is a:	A. Silver band B. Red band C. Gold band D. Either A or C E. Either A or B
7	If we increase the length of a simple pendulum four times, its time period will become	A. 2 times B. 3 times C. 4 times D. 6 times
8	A ball is dropped downwards After 1 second another ball is dropped downwards from the same point. What is the distance between them after 3 seconds	A. 25 m B. 20 m C. 50 m D. 9.8 m
9	When a conductor moved with its length parallel to the lines of magnetic field:	A. An emf is induced across its ends B. Emf induced is similar to that of a battery C. Emf passes through the conductor D. Both A and B E. None of these
10	Majority charge carriers in the p-region of p-n junction are:	A. electrons B. positrons C. Holes D. Neutrons E. None of these
11	A particle having the mass of electron and charge of a proton is called a	A. photon B. positron C. antiproton D. antineutrino
12	Which of the following quantities remain constant in step up transformer?	A. Current B. Voltage C. Power D. Heat
13	A capacitor is charged with a battery and then it is disconnected. A slab of dielectric is now inserted between the plates, then	A. The charge in the plates reduces and potential difference increase B. Potential difference between the plates increase, stored energy decreases and charge remains the same C. Potential difference between the plates decreases and charge remains unchanged D. None of the above

		U. none of the above
14	White light is directed at a diffraction grating at an angle normal to the grating starting at the normal to the grating (0°), the order of red, green and blue lights in the diffracted spectrum is.	A. Red, green, blue B. Green, blue, Red C. Red, blue, green D. Blue , green, red
15	When brakes are applied to a fast moving car, the passenger will be thrown:	A. Forward B. Backward C. Downward D. none of these
16	At low speeds, the drag force is	A. proportional to speed B. inversely proportional to speed C. not simply proportional to speed D. none of them
17	In case of point, source of light shape of wavefront is:	A. Spherical B. Cylindrical C. Plane D. None of these
18	The dimension of linear inertia is:	A. MLT^2 B. ML C. MLT D. MLT^{-1}
19	The interior of a hollow charged metal sphere is a region which:	A. Contain some magnitude of electric field B. Is full of electric field lines C. Is field-free region D. None of these

fareast-font-family:"Times New Roman";mso-fareast-theme-font: minor-fareast">Either (A) or (B)<o:p></o:p></p>
E. <p class="MsoNormal">None of these<o:p></o:p></p>

20 Angle between the ray of light and the corresponding wavefront is:

- A. 0
B. 60
C. 90
D. 120