

Physics ECAT Pre Engineering MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	The velocity gained by the fluid in falling through the distance ($h_1 - h_2$) under the action of gravity is equal to the speed of the action of gravity is equal to the speed of the	A. orifices B. efflux C. fluid D. none of them
2	Physics deals with the study of	A. Matter B. Energy C. Both of them D. Human Body
3	If a force of 0.05 N produces an elongation of 20 mm in a string, then its spring constant will be:	A. 250 N m^{-1} B. 25 N m^{-1} C. 2.5 N m^{-1} D. None of these
4	The length of a metallic rod is 5 meter at 100°C . The coefficient of cubical expansion of the metal will be	A. 2.0×10^{-5} B. 4.0×10^{-5} C. 6.0×10^{-5} D. 2.33×10^{-5}
5	A ball falls on the surface from 10 m height and rebounds to 2.5 m. if the duration of contact with the floor is 0.01 seconds then the average acceleration during contact is	A. 2100 m/s^2 B. 1400 m/s^2 C. 700 m/s^2 D. 400 m/s^2
6	Pair production is the phenomenon in which	A. matter is converted into energy B. energy is converted into matter C. light is converted into electrical energy D. electrical energy is converted into light
7	The sources of magnetic field are	A. isolated magnetic poles B. charges at rest C. charges in motion D. none of these
8	The wave motion set up in any medium depends upon:	A. Elasticity B. Inertia C. Density D. All of these
9	The locus of all the points in the same phase of vibration is called:	A. Wave packet B. Wave front C. Wave number D. None of them
10	The value of escape velocity of Earth planet comes out to be:	A. 11 m/sec B. 11 km/sec C. 11 km/hour D. 11 cm/sec
11	The ratio of the gravitational force F_g to the electrostatic force F_e between two electrons at the same distance apart is approximately	A. 9.8 B. 24×10^{19} C. 24×10^{42} D. 24×10^{-44}
12	The chemical behaviour of an atom is determined by	A. binding energy B. atomic number C. mass number D. number of isotopes
13	Angle between ray of light and the corresponding wavefront is	A. 0° B. 60° C. 90° D. 120°
14	The example of mechanical wave is	A. waves in ropes B. waves on water surface

A. <p class="MsoNormal" style="text-align:justify">Closed path<o:p></o:p></p>

B. <p class="MsoNormal" style="text-align:justify">Rectangular path<o:p></o:p></p>

C. <p class="MsoNormal" style="text-align:justify">Circular path<o:p></o:p></p>

D. <p class="MsoNormal" style="text-align:justify">Any of above<o:p></o:p></p>

E. <p class="MsoNormal" style="text-align:justify">Broken path<o:p></o:p></p>

15 Amperean path is a:

A. real gas
B. ideal gas
C. any gas may be ideal or real
D. none of them

16 In the study of thermodynamics, which gas is considered as the working substance

A. J-sec
B. Watt
C. N m/sec
D. Horsepower

18 The current produced by moving a loop of wire across a magnetic field is called

A. Direct current
B. Magnetic current
C. Alternating current
D. Induced current
E. None of these

19 From the theory of relativity, momentum p of the photon is related to energy as

A. $p = hfc$
B. $p = hf/c$
C. $p = f(hc, f)$
D. $p = cf/h$

20 Photocell is a device which converts

A. chemical energy into electrical energy
B. electrical energy into light energy
C. heat energy into electrical energy
D. light energy into electrical energy