

Physics ECAT Pre Engineering MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	During each cycle, alternating voltage reaches a peak value	A. One time B. Two times C. Four times D. A number of times depending on the frequency
2	The pattern of NaCl particles have a shape which is :	A. Cubic B. Body centred cubic C. Simple cubic D. face centred E. Both (A) and (C)
3	The photoelectric effect, the maximum energy of photoelectrons depends on the	A. particular metal surface B. frequency of incident light C. both of them D. none of them
4	The diameter of an atom is of the order	A. 10^{-125} m B. 10^{-11} m C. 10^{-10} m D. 10^{-9} m
5	Swimming is based on the principle of	A. Newton's 1st law B. Newton's 2nd law C. Newton's 3rd law D. All
6	The restoring force is always directed towards:	A. Rest position B. Equilibrium position C. Mean position D. All of them
7	Density of oxygen is about 16 times that of hydrogen therefore if speed of hydrogen is x, then speed of oxygen.	A. Greater than x B. The same C. Less than x D. Depending upon the pressure of gases
8	The law of conservation of energy gives us	A. equation of continuity B. Bernoulli's theorem C. both of them D. none of them
9	When charged particle is projected perpendicular to a uniform magnetic field its trajectory is	A. circular B. elliptical C. cycloid D. straight line
10	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. <p class="MsoNormal" style="text-align:justify">Thumb<o:p></o:p></p> B. <p class="MsoNormal" style="text-align:justify">Curled fingers<o:p></o:p></p> C. <p class="MsoNormal" style="text-align:justify">Middle finger<o:p></o:p></p> D. <p class="MsoNormal" style="text-align:justify">Arm of right hand<o:p></o:p></p> E. <p class="MsoNormal" style="text-align:justify">Arm of right hand<o:p></o:p></p>

11 The electrons in the outermost shell of an atom are called

A. core electrons
B. valence electrons
C. high energy electrons
D. none of them

12 Acceleration of body executing SHM is always directed towards

A. Extreme position
B. Mean position
C. Along the direction of motion
D. None

13 A beam of electrons is provided by an

A. electron gun
B. Supray
C. Injection
D. None of these

14 Wavelength of light, on the average, is given by

A. 10^{-14} m
B. 10^{-10} m
C. 10^{-6} m
D. 10^{-4} m

15 The emf is measured in:

A. Newton
B. Volt
C. J/C
D. Both A and B
E. Both B and C

16 If a train traveling at 72 kmph is to be brought to rest in a distance of 200 meters then its retardation should be

A. 20 ms^{-2}
B. 10 ms^{-2}
C. 2 ms^{-2}
D. 1 ms^{-2}

17 A spring of constant $k = 0.4 \text{ N m}^{-1}$ is to be extended through 10 cm at a place where $g = 10 \text{ m sec}^{-2}$. The mass to be suspended should be:

A. 4 gms
B. 0.4 gm
C. 40 gms
D. None of these

18 When a platinum wire is heated, it appears yellow at

A. 1600°C
B. 900°C
C. 1100°C
D. 1300°C

19 γ -rays behave like a particle because they explain the

A. Compton effect
B. Photoelectric effect
C. Pair-production
D. all the above

20 Balmer series was identified in:

A. 1685
B. 1785
C. 1885
D. 1985
E. 1585
