

Physics ECAT Pre Engineering MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	the current is pass through the straight wire. The magnetic field established around it has its lines of force:	<p>A. <p class="MsoNormal" style="text-align:justify">Circular and endless<o:p></o:p></p></p> <p>B. <p class="MsoNormal" style="text-align:justify">Oval in shape and endless<o:p></o:p></p></p> <p>C. <p class="MsoNormal" style="text-align:justify">Straight<o:p></o:p></p></p> <p>D. <p class="MsoNormal" style="text-align:justify">Parabolic<o:p></o:p></p></p> <p>E. All are true</p>
2	When brakes are applied to a fast moving car, the passenger will be thrown:	<p>A. Forward</p> <p>B. Backward</p> <p>C. Downward</p> <p>D. none of these</p>
3	A thermistor is a resistor which is:	<p>A. Light Sensitive</p> <p>B. Heat Sensitive</p> <p>C. Sound Sensitive</p> <p>D. All of these</p> <p>E. None of these</p>
4	Two copper balls of 1 cm and 2 cm in diameter are simultaneously dropped in the same viscous medium. The terminal velocity of bigger ball is:	<p>A. Not affected due to its size</p> <p>B. Twice that of small size ball</p> <p>C. Four times that of small size ball</p> <p>D. 1/4th of that of small size ball</p>
5	A ball is dropped from a height of 4.2 meters. To what height it will rise if there is no loss of KE after rebounding?	<p>A. 4.2 m</p> <p>B. 8.4</p> <p>C. 12.6</p> <p>D. None of these</p>
6	The chemical properties of all the isotopes of an elements are	<p>A. same</p> <p>B. different</p> <p>C. slightly different</p> <p>D. none of these</p>
7	In metallic crystals which of the following thing remains constant	<p>A. amplitude of oscillations</p> <p>B. temperature of solid</p> <p>C. average atomic positions</p> <p>D. all of them</p>
8	The time period of pendulum, at center of earth.	<p>A. Zero</p> <p>B. Infinite</p> <p>C. Maximum</p> <p>D. Minimum</p>
9	When body moves along a circular path with constant speed, it has an acceleration, which is always directed;	<p>A. Along the tangent</p> <p>B. Towards the centre</p> <p>C. Away from the centre</p> <p>D. None of them</p>
10	To observe interference of light, the condition, which must be met with is that the sources must be:	<p>A. Monochromatic</p> <p>B. Phase coherent</p> <p>C. Both of above</p> <p>D. None of above</p>
11	Root out the conventional source of energy:	<p>A. Energy from biomass</p> <p>B. hydroelectric energy</p> <p>C. Geothermal energy</p> <p>D. None of these</p>
12	Unit of viscosity is:	<p>A. $\text{Kg m}^{-1}\text{s}^{-1}$</p> <p>B. N s m^{-2}</p> <p>C. N m^{-2}</p>

C. $J = m \times \rho \times A \times v$

D. All of these

13 The reactance of a cell changes directly with

- A. frequency of a.c
- B. the inductance
- C. both a and b
- D. none of these

14 When three identical bulbs of 60 watt, 200 volt rating are connected in series to a 200 volt supply, the power drawn by them will be

- A. 180 watt
- B. 10 watt
- C. 20 watt
- D. 60 watt

15 The electric flux is linked with a surface will be maximum when

- A. The surface is held parallel to the electric field
- B. The surface is held perpendicular to the electric field
- C. The surface makes an angle of 45° with the electric field
- D. All of the above

16 The curve representing an isothermal process is called

- A. adiabat
- B. isotherm
- C. fixed temperature
- D. none of them

17 The time rate of change of displacement is called:

- A. Time
- B. Acceleration
- C. Speed
- D. Velocity

18 One KWh is equal to:

- A. 3.6×10^2 J
- B. 3.6 KJ
- C. 3.6×10^1 KJ
- D. 3.6 MJ

19 If an electron of charge 'e' is accelerated through a potential difference V , it will acquire energy

- A. Ve
- B. V/e
- C. e/V
- D. $2Ve$

20 A sphere of mass m and velocity $2V$ moving in the x direction collides with a sphere of mass $2m$ and velocity v moving in the y direction. If the collision is perfectly elastic, which of the following statements is correct

- A. The two spheres sticks together after impact
- B. The total kinetic energy before the impact is $3mv^2$
- C. The total momentum before impact is $4mv$
- D. Both B and C