

ECAT Physics Online Test

Sr	Questions	Answers Choice
1	The galvanometer can be made sensitive if the value of the factor C/BAN is	<p>A. constant</p> <p>B. small</p> <p>C. large</p> <p>D. none of these</p>
2	The thermistors are usually made of	<p>A. Metals with low temperature coefficient of resistivity</p> <p>B. Metals with high temperature coefficient of resistivity</p> <p>C. Metal oxides with high temperature coefficient of resistivity</p> <p>D. Semi conducting materials having low temperature coefficient of resistivity</p>
3	The waves which propagate out in the space due to oscillations of electric and magnetic fields are called:	<p>A. Mechanical waves</p> <p>B. Electromagnetic waves</p> <p>C. Matter waves</p> <p>D. All of them</p>
4	Mathematical manipulation of the two quantized states can be best carried if they are represented by	<p>A. high - low</p> <p>B. yes - no</p> <p>C. on - off</p> <p>D. 0 - 1</p>
5	Magnetic flux passing through a element whose vector area makes an angle 0° with lines of magnetic force is:	<p>A. $BA \cos \theta$</p> <p>B. Zero</p> <p>C. BA</p> <p>D. $BA \sin \theta$</p> <p>E. None of these</p>
6	Which one of the following is the unit of electric field intensity	<p>A. JC^{-1}</p> <p>B. Vm^{-1}</p> <p>C. Cm^{-1}</p> <p>D. CJ^{-1}</p>
7	The potential difference across each resistance in series combination is	<p>A. same</p> <p>B. different</p> <p>C. zero</p> <p>D. none of these</p>
8	the dilation of time applies to the timing processes which are:	<p>A. Physical</p> <p>B. Chemical</p> <p>C. Biological</p> <p>D. All of these</p> <p>E. None of these</p>
9	The mass of a body measured by a physical balance in a lift at rest is found to be m, if the lift is going up with an acceleration a, its mass will be measured as	<p>A. $m(1 - a/g)$</p> <p>B. $m(1 + a/g)$</p> <p>C. m</p> <p>D. Zero</p>
10	From the theory of relativity, momentum p of the photon is related to energy as	<p>A. $p = hf$</p> <p>B. $p = hf/c$</p> <p>C. $p = f(hc, f)$</p> <p>D. $p = cf/h$</p>
		A. In the forward direction on both the

11	When a bicycle is in motion, the frictional forces exerted by the ground are	wheels B. In the backward direction on both the wheels C. In the forward direction on the front wheel and the backward direction on the rear wheel D. In the backward direction on the front wheel and the forward direction on the rear wheel
12	In process of annihilation of matter, the two photons produced move in opposite direction to conserve	A. momentum B. charge C. energy D. mass
13	Referring to above figure, current in the coil P grows from zero to its maximum value:	A. At the instant the switch is closed B. At the instant the switch is opened C. When switch is kept open D. All of above E. Neither of above
14	In the resonance condition, the amplitude of the oscillator becomes	A. very large B. very small C. zero D. any one of them
15	Which one of the following has larger value of relative permittivity ϵ_r at room temperature?	A. Vacuum B. Air C. Glass D. Water
16	When a silicon crystal is doped with a pentavalent element, then the atom of the pentavalent element is known as	A. acceptor B. donor C. either of them D. none of them
17	Fluids resist force, This property is called	A. Stiffness B. Strength C. Ductility D. Elasticity
18	When a dielectric material is introduced between the plates of a charged condenser the electric field between the plates	A. Decreases B. Increases C. No change D. May increase or decrease
19	If we connected the ordinary DC ammeter to measure alternating current, it would measure its:	A. Instantaneous value B. RMS value C. Value averaged over a cycle D. Either (B) or (C) E. Either (A) or (C)
20	In the reverse process, the working substance passes through the same stages as in the direct process and	A. thermal effects at each stage are exactly reversed B. mechanical effects at each stage are exactly reversed C. thermal and mechanical effects at each stage remain the same D. thermal and mechanical effects at each stage are exactly reversed