

ECAT Physics Online Test

Sr	Questions	Answers Choice
1	Fluids can transmit:	<p>A. Transverse wave B. Compressional wave C. Both of them D. None of them</p>
2	One mole of any substance contain	<p>A. same number of molecules B. different number of molecules C. may be same or different D. none of them</p>
3	The value of threshold frequency for different metals is	<p>A. different B. same C. may be different or may be same D. none of these</p>
4	A piece of fuse wire melts when a current of 15 ampere flows through it. With this current. If it dissipates 22.5 W, the resistance of fuse wire will be	<p>A. Zero B. 10Ω C. 1Ω D. 0.10Ω</p>
5	Energy is dissipated and consequently the energy mass system do not oscillate indefinitely because of	<p>A. very small energy B. very large energy C. frictional forces D. acceleration due to gravity</p>
6	On the exhaust stroke, the outlet valves opens. The residual gases are expelled and piston moves	<p>A. outwards B. inwards C. in either way D. none of these</p>
7	Substances which break just after the elastic limit is reached, are known as	<p>A. brittle substances B. ductile substances C. plastic substances D. elastic substances</p>
8	A typical four stroke petrol engine undergoes how many successive processes in each cycle	<p>A. one B. two C. three D. four</p>
9	Laplace formula is derived from	<p>A. Isothermal change B. Adiabatic change C. Isobaric change D. None of these</p>
10	Faraday's law of electromagnetic induction has been used in the construction of:	<p>A. Galvanometer B. Voltmeter C. Electric motor D. Electric generator E. Commutator</p>
11	The wave form of alternating voltage is the graph between:	<p>A. Voltage across X-axis and time across y-axis B. Current and time C. Voltage along y-axis and time along x-axis D. Voltage and current E. Either (B) or (D)</p>
		<p>A. Kg m⁻¹sec⁻¹</p>

12	Unit of viscosity is:	<p>1¹</p> <p>B. N s m⁻²</p> <p>C. J s m⁻³</p> <p>D. All of these</p>
13	When a shell explodes in mid-air, the total momentum of its fragments is	<p>A. less than the momentum of shell</p> <p>B. equal to the momentum of shell</p> <p>C. greater than the momentum of shell</p> <p>D. none of them</p>
14	If a material object moves with the speed of light 'C' its mass becomes	<p>A. Equal to its rest mass</p> <p>B. Four times of its rest mass</p> <p>C. Double of its rest mass</p> <p>D. Infinite</p>
15	The disorder in the system increases due to the	<p>A. removal of heat</p> <p>B. addition of heat</p> <p>C. removal or addition of heat</p> <p>D. none of them</p>
16	Which of the following is an example of a S.H.M?	<p>A. motion of a projectile</p> <p>B. motion of a train along a circular path</p> <p>C. motion of swing</p> <p>D. electrons revolving around the nucleus</p>
17	A voltmeter is used to measure the	<p>A. potential difference</p> <p>B. current</p> <p>C. temperature</p> <p>D. resistance</p>
18	The r.m.s. value of alternating current is equal to its maximum value at angle of	<p>A. 60°</p> <p>B. 45°</p> <p>C. 30°</p> <p>D. 90°</p>
19	The materials in which valence electrons are bound very tightly to their atoms and are not free, are known as	<p>A. conductors</p> <p>B. insulators</p> <p>C. semi-conductors</p> <p>D. all of them</p>
20	At the starting point of the free fall motion of an object, its acceleration will be	<p>A. maximum</p> <p>B. minimum</p> <p>C. zero</p> <p>D. none of them</p>