

## ECAT Pre General Science Online Test

Sr	Questions	Answers Choice
1	A boy pulls a toy car through a distance of 5 m by applying a force of 0.5 N, Which makes an angle of $60^\circ$ with the horizontal. The work done by the boy is:	A. 1.25 J B. 12.5 J C. 125 J D. None of these
2	If we draw a graph between d(along x-axis) and F (along y-axis) and get a straight line horizontal to x-axis then area under this straight line represents:	A. Power B. Work C. Pressure D. None of these
3	The work done by a force, keeping an object in circular motion with constant speed is:	A. Zero J B. 1 J C. 0.1 J D. 0.01 J
4	Which force is not a conservative force?	A. Frictional force B. Gravitational force C. Electric force D. Elastic spring force
5	A laborer carrying a load on his head moves from the rest on a horizontal road to another point where he comes to rest. He has done:	A. Minimum Work B. Maximum Work C. Zero Work D. Negative Work
6	A body moves a distance of 10 m along a straight line under the action of a force of 5 N. If the work done is 25 J, the angle which force makes with the direction of motion of a body is:	A. $0^\circ$ B. $30^\circ$ C. $60^\circ$ D. $90^\circ$
7	A 100 kg car is moving at a speed of 10 m/sec and comes to rest after covering a distance of 50 m. the amount of work done against friction is:	A. $+5 \times 10^1$ J B. $+5 \times 10^2$ J C. $+5 \times 10^3$ J D. $+5 \times 10^4$ J
8	When a body moves against the force of friction on a horizontal plane, the work done by the body is:	A. Positive B. Negative C. Zero D. None of these
9	In the force applied to parallel to the direction of motion, then the work done is:	A. Positive B. Negative C. Zero D. None of these

		D. None of these
10	A 2 kg block is held 1 m above floor for 50 seconds. The work done is:	A. Zero B. 10.2 J C. 100 J D. 980 J
11	Work done in lower and bucket into the well is:	A. Zero B. Positive C. Negative D. None of these
12	A field in which the work done is moving a body along closed path is zero is called:	A. Nuclear filed B. Conservative field C. Gravitational field D. Non-conservative field
13	When a force of 0.5 N displaces a body through a distance of 2m in the direction of force, the work done is:	A. 2 J B. 0.25 J C. 1 J D. 0.5 J
14	The work done in moving a body between two points in a conservation field is independent of the:	A. Direction B. Force applied C. Path followed by the body D. Power
15	Which of the following type of force can do no work on the particle on which it acts:	A. Frictional force B. Gravitational force C. Electric force D. Centripetal force
16	The field in which work done is moving body between two points depends upon the path followed is called:	A. Conservative filed B. Non-conservative field C. Electric field D. None of these
17	Work done along a closed path in a gravitational field is:	A. Maximum B. Minimum C. Zero D. Unity
18	A body moves a distance of 10 m along a straight line under the action of a force of 5 N and work done is 25J. the angle which the force makes with the direction of motion will be:	A. 60° B. 90° C. 30° D. 0°
19	The space around the earth within which it exerts a force of attraction on other bodies is known as:	A. Nuclear field B. Conservative field C. Electric field D. Gravitational field
		A. 0°

20	Work done is maximum when angle between force and displacement is:	<p>repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;"&gt;"&lt;/span&gt;</p> <p>B. 90°  <span &gt;"&lt;="" p="" span&gt;<="" style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;"> <p>C. 180°  <span &gt;"&lt;="" p="" span&gt;<="" style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;"> <p>D. None of these</p> </span></p></span></p>
21	Work has a dimension as that of:	<p>A. Torque</p> <p>B. Angular momentum</p> <p>C. Linear momentum</p> <p>D. Power</p>
22	If force and displacement are in opposite direction, the work done is taken as:	<p>A. Positive work</p> <p>B. Negative work</p> <p>C. Zero work</p> <p>D. Infinte work</p>
23	The work performed on an object does not depend on:	<p>A. Force applied</p> <p>B. Angle at which force is inclined to the displacement</p> <p>C. Initial velocity of the object</p> <p>D. Displacement</p>
24	Work is always done on a body when:	<p>A. A force acts on it</p> <p>B. It moves through certain distance</p> <p>C. None of A and B is correct</p> <p>D. Both A and B is correct</p>
25	Work is a:	<p>A. Scalar quantity</p> <p>B. Vector quantity</p> <p>C. Base quantity</p> <p>D. None of these</p>
26	One newton is a force that produces an acceleration of $0.5 \text{ m/sec}^2$ in a body of mass:	<p>A. 2 Kg</p> <p>B. 3 Kg</p> <p>C. 4 Kg</p> <p>D. 8 Kg</p>
27	Force is a:	<p>A. Scalar quantity</p> <p>B. Base quantity</p> <p>C. Derived quantity</p> <p>D. None of these</p>
28	An object is dropped from a height of 100 m. Its velocity at the moment it touches the ground is:	<p>A. 100 m/sec</p> <p>B. 140 m/sec</p> <p>C. 1960 m/sec</p> <p>D. 196 m/sec</p>
29	Body which falls freely under gravity provides good example of motion under:	<p>A. Uniform acceleration</p> <p>B. Non-uniform acceleration</p> <p>C. Uniform velocity</p> <p>D. None of these</p>
30	Swimming becomes possible because of _____ law of motion.	<p>A. First</p> <p>B. Second</p> <p>C. Third</p> <p>D. None of these</p>