

ECAT Physics Chapter 4 Work and Energy

Sr	Questions	Answers Choice
1	The types of mechanical energy is/are:	<p>A. Kinetic energy B. Potential energy C. Both of these D. None of these</p>
2	The angle between centripetal force and displacement of the body moving in a circle is:	<p>A. 0° B. 90° C. 180° D. None of these</p>
3	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:	<p>A. 60° B. 90° C. 30° D. 0°</p>
4	When a falling body hits ground, its KE changes to _____ energy.	<p>A. Potential B. Chemical C. Mechanical D. sound and heat</p>

5	Work is always done on a body when	A. A force acts on it B. It moves through certain distance C. None of A or B is correct D. Both A and B are correct
6	Work done is independent of path followed in _____	A. Gravitational field B. Magnetic field C. Electric field D. All of these
7	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°
8	A 100 Kg car is moving at the speed of 10 m/sec and comes to rest after covering a distance of 50 m. The amount of work done against the 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
9	If one newton force acts on a body and displaces the body through 1m work done on body is	A. 1 dyne B. 1 joule C. 1KJ D. 1 Watt
10	Work done is maximum when angle between force and displacement is	A. 0° B. 90° C. 180° D. None of these
11	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
12	The tidal energy is due to gravitational pull of :	A. sun B. moon C. Mars D. None of these
13	Which of the following types 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
14	The consumption of energy by a 60 W bulb in 2 minutes is:	A. 2 watt-hour B. 120 watt-hour C. 30 watt-hour D. None of these
15	Work done is maximum when angle between force and displacement is:	A. 0° B. 90° C. 180° D. None of these
16	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
17	Energy stored in the spring of a watch is called	A. Potential energy B. Kinetic energy C. Nuclear energy D. Elastic potential

18	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
19	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. 0.5 J B. 2 J C. 0.25 J D. 1 J
20	The work performed on an object does not depend on:	A. Force applied B. Angle at which force is inclined to the displacement C. Initial velocity of the object D. Displacement