

ECAT Physics Chapter 4 Work and Energy

Sr	Questions	Answers Choice
1	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
2	The angle between centripetal force and displacement of the body moving in a circle is:	A. 0 ° B. 90 ° C. 180 <span 10.5pt;="" 107%;="" arial,="" backg<="" background-attachment:="" background-clip:="" background-image:="" background-origin:="" background-position:="" background-repeat:="" background-size:="" font-family:="" font-size:="" initial;="" line-height:="" sans-serif;="" style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-position: initial; background-repeat: initial; background-attachment: initial; background-attachment: initial; background-origin: initial; background-origin: initial; background-origin: initial; background-clip: initial; background-cl</td></tr><tr><td>3</td><td>A two Kg block is held 1 m above the floor for 50 seconds, the work done is:</td><td>A. Zero
B. 10.2 J
C. 100 J
D. 980 J</td></tr><tr><td>4</td><td>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:</td><td>A. 60

5	Which of the following is not a unit of power:	A. J-sec B. Watt C. N m/sec D. Horsepower
6	Which force is not a conservative force?	A. Frictional force B. Gravitational force C. Electric force D. Elastic spring force
7	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
8	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° 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
9	1 J =?	A. 10 ⁷ erges B. 10 ⁻⁷ erges C. 10 ⁵ erges D. 10 ⁻⁵ erges
10	Tick the conservative force	A. Tension in a string B. Air resistance C. Elastic spring D. Frictional force
11	Energy stored in the spring of a watch is called	A. Potential energy B. Kinetic energy C. Nuclear energy D. Elastic potential
12	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
13	Work is a scalar product of	A. Force, Velocity B. Velocity, Displacement C. Force, Displacement D. Force, Momentum
14	The space around the earth in which its gravitational force acts on a body is called	A. Electric Field B. Gravitational field C. Magnetic field D. Conservative field
15	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
16	Teh consumption of energy by a 1000 watt heater in half an hour is:	A. 5 Kwh B. 0.5 Kwh C. 2.5 Kwh D. 3.2 Kwh
17	A body moves a distance of 10 m along a straight line under the action of a force of 5 N and work done in 25J. The angle which the force makes with the direction of motion will be	A. 60° B. 90° C. 30° D. 0°
18	A solar cell converts energy of the Sun into:	A. Heat energy B. Magnetic energy C. Light energy D. Sound energy
19	Area under the force displacement graph gives	A. Power B. Work C. Heat D. Energy
20	Work done is independent of path followed in	A. Gravitational field B. Magnetic field C. Electric field D. All of these