

Physics ECAT Pre Engineering Chapter 4 Work and Energy

Sr	Questions	Answers Choice
1	Work has a dimension as that of:	A. Torque B. Angular momentum C. Linear momentum D. Power
2	The commercial unit of electrical energy is :	A. K Watt B. KWH C. Horse power D. Joule
3	Work done along a closed path in a gravitational field is:	A. Maximum B. Minimum C. Zero D. Unity
4	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
5	Work done is maximum when angle between force and displacement is:	A. 0° B. 90° C. 180° D. None of these
6	Work is a:	A. Scalar quantity B. Vector quantity C. Base quantity D. None of these
7	When force and displacement are perpendicular to each other than work is equal to	A. Unity B. Infinity C. Zero D. -Fd
8	SI Unit of work is	A. Nm B. Joule C. Nms D. Both a and b
9	A solar cell is made from:	A. Iron B. Silicon C. Germanium D. Copper

A. 0°
B. 90°
C. 180°
D. None of these

10	The angle between centripetal force and displacement of the body moving in a circle is:	<p>attachment: initial; background-origin: initial; background-clip: initial;">°</p> <p>B. 90°</p> <p>C. 180°</p> <p>D. None of these</p>
11	Area under the force displacement graph gives	<p>A. Power</p> <p>B. Work</p> <p>C. Heat</p> <p>D. Energy</p>
12	The work done on the body will be zero if:	<p>A. No force is applied on the body</p> <p>B. Force is applied but no displacement</p> <p>C. Angle between F(force) and d(displacement) is 90°</p> <p>D. All of these are correct</p>
13	The energy stored in the water of the dam is:	<p>A. Electric energy</p> <p>B. Kinetic energy</p> <p>C. Potential energy</p> <p>D. None of these</p>
14	Which of the following is not a unit of power:	<p>A. J-sec</p> <p>B. Watt</p> <p>C. N m/sec</p> <p>D. Horsepower</p>
15	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:	<p>A. 1.25 J</p> <p>B. 12.5 J</p> <p>C. 125 J</p> <p>D. None of these</p>
16	Which force is not a conservative force?	<p>A. Frictional force</p> <p>B. Gravitational force</p> <p>C. Electric force</p> <p>D. Elastic spring force</p>
17	When two protons are brought are brought closer potential energy of both of them:	<p>A. Increases</p> <p>B. Decreases</p> <p>C. Remains same</p> <p>D. None of these</p>
18	The consumption of energy by a 60 W bulb in 2 minutes is:	<p>A. 2 watt-hour</p> <p>B. 120 watt-hour</p> <p>C. 30 watt-hour</p> <p>D. None of these</p>
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:	<p>A. 2 J</p> <p>B. 0.25 J</p> <p>C. 1 J</p> <p>D. 0.5 J</p>
20	If work is done at the rate of 2 k j per second, then total work done in half an hour will be:	<p>A. 0.5 Kwh</p> <p>B. 2 Kwh</p> <p>C. 1 Kwh</p> <p>D. None of these</p>