

## Physics ECAT Pre Engineering Chapter 4 Work and Energy

Sr	Questions	Answers Choice
1	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 the direction of motion will be:	<p>A. <math>60^\circ</math></p> <p>B. <math>90^\circ</math></p> <p>C. <math>30^\circ</math></p> <p>D. <math>0^\circ</math></p>
2	Work done along a closed path in a gravitational field is:	<p>A. Maximum</p> <p>B. Minimum</p> <p>C. Zero</p> <p>D. Unity</p>
3	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. Infinite work</p>
4	Tick the conservation force:	<p>A. Tension in a string</p> <p>B. Air resistance force</p> <p>C. Elastic spring</p> <p>D. Frictional force</p>
5	If work is done at the rate of 2 k j per second, then total work done is half an hour will be:	<p>A. 0.5 Kwn</p> <p>B. 2 Kwh</p> <p>C. 1 Kwh</p> <p>D. None of these</p>
6	In the force applied to parallel to the direction of motion, then the work done is:	<p>A. Positive</p> <p>B. Negative</p> <p>C. Zero</p> <p>D. None of these</p>
7	The work done by a force keeping an object in circular motion with constant speed is:	<p>A. Zero J.</p> <p>B. 0.1 J</p> <p>C. 1 J</p> <p>D. 0.01 J</p>
8	Work done is maximum when angle between force and displacement is	<p>A. <math>0^\circ</math></p> <p>B. <math>90^\circ</math></p> <p>C. <math>180^\circ</math></p> <p>D. None of these</p>
9	1 J = _____?	<p>A. <math>10^7</math> erges</p> <p>B. <math>10^8</math> erges</p> <p>C. <math>10^5</math> erges</p> <p>D. <math>10^6</math> erges</p>

10	The commercial unit of electrical energy is :	A. K Watt B. KWH C. Horse power D. Joule
11	The space around the earth within it exerts a force of attraction on other bodies of known as:	A. Nuclear field B. Conservative field C. Electric field D. Gravitational field
12	The tidal energy is due to gravitational pull of :	A. sun B. moon C. Mars D. None of these
13	A two Kg block is held 1 m above the floor for 50 seconds, the work done is:	A. Zero B. 10.2 J C. 100 J D. 980 J
14	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
15	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
16	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
17	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
18	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
19	The work done in moving a body between two points in a conservative field is independent of the	A. Direction B. Force applied C. Path followed by the body D. Power
20	Which force is not a conservative force?	A. Frictional force B. Gravitational force C. Electric force D. Elastic spring force