

## Physics ECAT Pre Engineering Chapter 4 Work and Energy

Sr	Questions	Answers Choice
1	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
2	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
3	Work is a scalar product of	A. Force, Velocity B. Velocity, Displacement C. Force, Displacement D. Force, Momentum
4	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 is correct
5	Work is a Quantity	A. Vector B. Scalar C. Non-physical D. None of these
6	Work done is maximum when angle between force and displacement is:	A. $0^\circ$ B. $90^\circ$ C. $180^\circ$ D. None of these
7	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
8	Work has the dimension as that of:	A. Torque B. Angular momentum C. Linear momentum D. Power
9	Which one is conservative force	A. Electric force B. Frictional force C. Normal force D. Air resistance
10	When the body is 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

11	Work done in lower and bucket into the well is:	A. Zero B. Positive C. Negative D. None of these
12	A solar cell converts energy of the Sun into:	A. Heat energy B. Magnetic energy C. Light energy D. Sound energy
13	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
14	Tick the conservation force:	A. Tension in a string B. Air resistance force C. Elastic spring D. Frictional force
15	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 the force makes with the direction of motion of a body is:	A. 0° B. 30° C. 60° D. 90°
16	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
17	Work done is maximum when angle between force and displacement is:	A. 0° B. 90° C. 180° D. None of these

18	The field in which work done in moving body between two points depends upon the path followed is called:	A. Conservative field B. Non-conservative field C. Electric field D. None of these
19	If force and displacement are in opposite direction, the work done is taken as:	A. Positive work B. Negative work C. Zero work D. Infinite work
20	Work has a dimension as that of:	A. Torque B. Angular momentum C. Linear momentum D. Power