

## ECAT Physics Chapter 4 Work and Energy

Sr	Questions	Answers Choice
1	Work done is lowering the bucket into the well is:	A. Zero B. Positive C. Negative D. None of these
2	The power of an electric generating station is expressed in:	A. Kilo Jule B. Kilowatt-hour C. Kilo watt D. Watt
3	Work is product of:	A. Force and velocity B. Heat and energy C. Force and displacement D. None of these
4	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
5	In the force applied is parallel to the direction of motion, then work done is:	A. Maximum B. Minimum C. Zero D. None of these
6	The types of mechanical energy is/are:	A. Kinetic energy B. Potential energy C. Both of these D. None of these
7	The work done by a force, keeping an object in circular motion with constant speed is:	A. Zero J B. 1 J C. 0.1 J D. 0.01 J
8	A solar cell converts energy of the Sun into:	A. Heat energy B. Magnetic energy C. Light energy D. Sound energy
9	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
10	The unit of work in CGS system is	A. Joule B. Erg C. Dyne D. Watt
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	Work is a scalar product of	A. Force, Velocity B. Velocity, Displacement C. Force, Displacement D. Force, Momentum
13	The work done on the body will be zero if:	A. No force is applied on the body B. Force is applied but no displacement C. Angle between F(force) and d(displacement) is $90^\circ$

14 Work done by the force of friction is always  
 A. Positive  
 B. Zero  
 C. Negative  
 D. Maximum

15 When velocity of moving body is doubled, the quantity which is also doubled is its:  
 A. K.E.  
 B. Acceleration  
 C. Momentum  
 D. P.E.

16 The angle between centripetal force and displacement of the body moving in a circle is:  
 A.  $0^\circ$   
 B.  $90^\circ$   
 C.  $180^\circ$   
 D. None of these

17 The work done by a force keeping an object in circular motion with constant speed is:  
 A. Zero J.  
 B. 0.1 J  
 C. 1 J  
 D. 0.01 J

18 Work done is independent of path followed in \_\_\_\_\_  
 A. Gravitational field  
 B. Magnetic field  
 C. Electric field  
 D. All of these

19 Which force is not a conservative force?  
 A. Frictional force  
 B. Gravitational force  
 C. Electric force  
 D. Elastic spring force

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