

## ECAT Physics Chapter 4 Work and Energy

0	Overtions	Annuary Obsiss
Sr	Questions	Answers Choice
1	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
2	A 100 Kg car is moving at the speed of 10 m/sec and comes to rest after covering a distance of 50 m. The amount of work done against the friction is:	A. +5 X 10 <sup>1</sup> J B. +5 X 10 <sup>2</sup> J C. +5 X 10 <sup>3</sup> J D. +5 X 10 <sup>4</sup> J
3	Which one is conservative force	A. Electric force B. Frictional force C. Normal force D. Air resistance
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	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
6	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:	A. 60

		D. Infinite work
10	A solar cell converts energy of the Sun into:	A. Heat energy B. Magnetic energy C. Light energy D. Sound energy
11	The value of escape velocity of Earth planet comes out to be:	A. 11 m/sec B. 11 km/sec C. 11 km/hour D. 11 cm/sec
12	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
13	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
14	Work is a scalar product of	A. Force, Velocity B. Velocity, Displacement C. Force, Displacement D. Force, Momentum
15	A boy pulls a toy car through a distance of 5 m by applying a force of 0.5 N, which makes and angle of $60^\circ$ 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
16	The work done 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
17	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
18	1 J =?	A. 10 <sup>7</sup> erges B. 10 <sup>-7</sup> erges C. 10 <sup>5</sup> erges D. 10 <sup>-5</sup> erges
19	The dimensions of work	A. [MLT <sup>-1</sup> ] B. [MLT <sup>-2</sup> ] C. [ML <sup>2</sup> T <sup>-2</sup> ] D. [MLT]
20	Work is a:	A. Scalar quantity B. Vector quantity C. Base quantity D. None of these