

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^{-1} 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:

A. 90°
B. 180°
C. 180°
D. None of these

11 Area under the force displacement graph gives

A. Power
B. Work
C. Heat
D. Energy

12 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°
D. All of these are correct

13 The energy stored in the water of the dam is:

A. Electric energy
B. Kinetic energy
C. Potential energy
D. None of these

14 Which of the following is not a unit of power:

A. J-sec
B. Watt
C. N m/sec
D. Horsepower

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:

A. 1.25 J
B. 12.5 J
C. 125 J
D. None of these

16 Which force is not a conservative force?

A. Frictional force
B. Gravitational force
C. Electric force
D. Elastic spring force

17 When two protons are brought closer potential energy of both of them:

A. Increases
B. Decreases
C. Remains same
D. None of these

18 The consumption of energy by a 60 W bulb in 2 minutes is:

A. 2 watt-hour
B. 120 watt-hour
C. 30 watt-hour
D. None of these

19 When a force of 0.5 N displaces a body through a distance of 2 m in the direction of force, the work done is:

A. 2 J
B. 0.25 J
C. 1 J
D. 0.5 J

20 If work is done at the rate of 2 kJ per second, then total work done in half an hour will be:

A. 0.5 Kwh
B. 2 Kwh
C. 1 Kwh
D. None of these