

ECAT Physics Chapter 4 Work and Energy

Sr	Questions	Answers Choice
1	When a force of 0.5 N displaces a body through a distance of 2m in the direction of force, the work done is	<p>A. 0.5 J B. 2 J C. 0.25 J D. 1 J</p>
2	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:	<p>A. 60° B. 90° C. 30° D. 0°</p>
3	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. 60° B. 90° C. 30° D. 0°</p>

4 When force and displacement are perpendicular to each other than work is equal to
A. Unity
B. Infinity
C. Zero
D. -Fd

5 Work has the dimension as that of:
A. Torque
B. Angular momentum
C. Linear momentum
D. Power

6 The field in which work done in moving a 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

7 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

8 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

9 The types of mechanical energy is/are:
A. Kinetic energy
B. Potential energy
C. Both of these
D. None of these

10 Work done is independent of path followed in _____
A. Gravitational field
B. Magnetic field
C. Electric field
D. All of these

11 Work done along a closed path in a gravitational field is:
A. Maximum
B. Minimum
C. Zero
D. Unity

12 Watt x second is unit of:
A. Force
B. Work
C. Power
D. None of these

13 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

14 A field in which the work done in moving a body along closed path is zero is called:
A. Nuclear field
B. Conservative field
C. Gravitational field
D. Non-conservative field

15 Work done in lower and bucket into the well is:
A. Zero
B. Positive
C. Negative
D. None of these

16 The commercial unit of electrical energy is :
A. K Watt
B. KWH
C. Horse power
D. Joule

17 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

18 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

19 Teh consumption of energy by a 1000 watt heater in half an hour is:
A. 5 Kwh
B. 0.5 Kwh
C. 2.5 Kwh
D. 3.2 Kwh

20 If work is done at the rate of 2 k j per second, then total work done is half an hour will be:
A. 0.5 Kwh
B. 2 Kwh
C. 1 Kwh
D. None of these

