

Physics ECAT Pre Engineering Chapter 4 Work and Energy

Sr	Questions	Answers Choice
1	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
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. $+5 \times 10^{10}$ J B. $+5 \times 10^{11}$ J C. $+5 \times 10^{12}$ J D. $+5 \times 10^{13}$ J
3	The space around the earth in which its gravitational force acts on a body is called	A. Electric Field B. Gravitational field C. Magnetic field D. Conservative field
4	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
5	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
6	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.
7	Tick the conservation force:	A. Tension in a string B. Air resistance force C. Elastic spring D. Frictional force
8	If one newton force acts on a body and displaces the body through 1m work done on body is	A. 1 dyne B. 1 joule C. 1KJ D. 1 Watt
9	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
10	The work done in 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
11	The tidal energy is produced due to rotation of Earth relative to:	A. Moon B. Sun C. Oceans D. Water
12	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
13	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
		A. 0

14 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. 30°
B. 60°
C. 90°
D. 120°

15 Area under the force displacement graph gives

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

16 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

17 When a falling body hits ground, its KE changes to _____ energy.

A. Potential
B. Chemical
C. Mechanical
D. sound and heat

18 When a wall is pushed by a person very strongly, he has done:

A. Maximum work
B. Zero work
C. Positive work
D. Negative work

19 Work is a:

A. Scalar quantity
B. Vector quantity
C. Base quantity
D. None of these

20 Which one is conservative force

A. Electric force
B. Frictional force
C. Normal force
D. Air resistance