

Physics ECAT Pre Engineering Chapter 4 Work and Energy

Sr	Questions	Answers Choice
1	Which one is conservative force	A. Electric force B. Frictional force C. Normal force D. Air resistance
2	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
3	If we draw a graph between d (along x-axis) and F (along y-axis) and get a straight line horizontal to x-axis, then area under this straight line represents:	A. Power B. Work C. Pressure D. None of these
4	Work done is independent of path followed in _____	A. Gravitational field B. Magnetic field C. Electric field D. All of these
5	Which force is not a conservative force?	A. Frictional force B. Gravitational force C. Electric force D. Elastic spring force
6	Work is product of:	A. Force and velocity B. Heat and energy C. Force and displacement D. None of these
7	The amount of coal used since 1945 up till now as compared to that used in the whole of history before that is	A. Much more B. Very small C. No amount at all D. None of these
8	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
9	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
10	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
11	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
12	The tidal energy is produced due to rotation of Earth relative to:	A. Moon B. Sun C. Oceans D. Water
13	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.
14	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
15	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. 2 J

D. 0.01 J

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- 16 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
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- 17 A two Kg block is held 1 m above the floor for 50 seconds, the work done is:
- A. Zero
B. 10.2 J
C. 100 J
D. 980 J
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- 18 The types of mechanical energy is/are:
- A. Kinetic energy
B. Potential energy
C. Both of these
D. None of these
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- 19 The Space around the Earth within which it exerts a force of attraction on other bodies is known as
- A. Nuclear field
B. Conservative field
C. Electric field
D. Gravitational field
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- 20 Work is a:
- A. Scalar quantity
B. Vector quantity
C. Base quantity
D. None of these
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