

ECAT Pre General Science Physics Chapter 4 Work and Energy

Sr	Questions	Answers Choice
1	Work is product of:	A. Force and velocity B. Heat and energy C. Force and displacement D. None of these
2	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
3	Tick the conservation force:	A. Tension in a string B. Air resistance force C. Elastic spring D. Frictional force
4	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
5	Work done is independent of path followed in _____	A. Gravitational field B. Magnetic field C. Electric field D. All of these
6	The field in which work done is moving 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	When a force of 0.5 N displaces a body through a distance of 2m in the direction of force, the work done is	A. 0.5 J B. 2 J C. 0.25 J D. 1 J
8	SI Unit of work is	A. Nm ⁻¹ B. Joule C. Nms D. Both a and b
9	When force and displacement are perpendicular to each other than work is equal to	A. Unity B. Infinity C. Zero D. -Fd
10	Work is always done on a body when:	A. A force acts on it B. It moves through certain distance C. None of A or B is correct D. Both A and B is correct
11	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. 0.01 J
12	1 J = _____?	A. 10^7 erges B. 10^{-7} erges C. 10^5 erges D. 10^{-5} erges
13	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
14	Power is a :	A. Vector quantity B. Base quantity C. Scalar quantity D. None of these
15	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

		D. None of these
16	Work is always done on a body when:	A. A force acts on it B. It moves through certain distance C. None of A and B is correct D. Both A and B is correct
17	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° B. 90° C. 30° D. 0°
18	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 Kwn B. 2 Kwh C. 1 Kwh D. None of these
19	Area under the force displacement graph gives	A. Power B. Work C. Heat D. Energy
20	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