

Physics ECAT Pre Engineering Chapter 4 Work and Energy

Sr	Questions	Answers Choice
1	Work done along a closed path in a gravitational field is:	A. Maximum B. Minimum C. Zero D. Unity
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	The total work done in moving the body up and then down through the same height in a gravitational field is equal to:	A. mgh B. Its wight C. Weight X height D. Zero
4	Work done is maximum when angle between force and displacement is	A. 0° B. 90° C. 180° D. None of these
5	Which force is not a conservative force?	A. Frictional force B. Gravitational force C. Electric force D. Elastic spring force
6	A solar cell converts energy of the Sun into:	A. Heat energy B. Magnetic energy C. Light energy D. Sound energy
7	A 2 kg block is held 1 m above floor for 50 seconds. The work done is:	A. Zero B. 10.2 J C. 100 J D. 980 J
8	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
9	Tick the conservation force:	A. Tension in a stringB. Air resistance forceC. Elastic springD. Frictional force
10	Escape velocity from surface of Moon as compared to that from Earth surface is:	A. Greater B. Smaller C. Equal D. None of thes
11	The ultimate source of money sources of energy is:	A. Sun B. Air C. Water D. Petroleum
12	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
13	Work is a 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 are correct
14	Which one is conservative force	A. Electric force B. Frictional force C. Normal force D. Air resistance
15	Work is a scalar product of	A. Force, Velocity B. Velocity, Displacement C. Force, Displacement

		D. Force, Momentum
16	Maximum work is done when force and displacement are	A. Parallel B. Antiparallel C. Perpendicular D. Both a and b
17	The work done in moving a body between two points in a conservative field is independent of the	A. Direction B. Force applied C. Path followed by the body D. Power
18	Work done is maximum when angle between force and displacement is:	A. 0 ° B. 90 ° C. 180 ° D. None of these
19	A 100 Kg car is moving at the speed of 10 m/sec and comes to rest after covering a distance of 50 m. The amount of work done against the friction is:	A. +5 X 10 ¹ J B. +5 X 10 ² J C. +5 X 10 ³ J D. +5 X 10 ⁴ J
20	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