

## Physics ECAT Pre Engineering Chapter 4 Work and Energy

Sr	Questions	Answers Choice
1	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
2	Power is a :	A. Vector quantity B. Base quantity C. Scalar quantity D. None of these
3	SI Unit of work is	A. Nm <sup>-1</sup> B. Joule C. Nms D. Both a and b
4	A body moves a distance of 10 m along a straight line under the action of a force of 5 N and work done in 25J. The angle which the force makes with the direction of motion will be	A. 60° B. 90° C. 30° D. 0°
5	The tidal energy is due to gravitational pull of :	A. sun B. moon C. Mars D. None of these
6	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
7	Area under the force displacement graph gives	A. Power B. Work C. Heat D. Energy
8	The dimensions of work	A. [MLT <sup>-1</sup> ] B. [MLT <sup>-2</sup> ] C. [ML <sup>2</sup> T <sup>-2</sup> ] D. [MLT]
9	The energy stored in the water of the dam is:	A. Electric energy B. Kinetic energy C. Potential energy D. None of these
10	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
11	The unit of work in CGS system is	A. Joule B. Erg C. Dyne D. Watt
12	Work done is maximum when angle between force and displacement is:	A. 0° B. 90° C. 180°

		sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">°</span> D. None of these
13	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
14	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
15	Tick the conservative force	A. Tension in a string B. Air resistance C. Elastic spring D. Frictional force
16	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 force makes with the direction of motion of a body is:	A. 0<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">°</span> B. 30<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">°</span> C. 60<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">°</span> D. 90<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">°</span>
17	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
18	A solar cell is made from:	A. Iron B. Silicon C. Germanium D. Copper
19	Which force is not a conservative force?	A. Frictional force B. Gravitational force C. Electric force D. Elastic spring force
20	When two protons are brought are brought closer potential energy of both of them:	A. Increases B. Decreases C. Remains same D. None of these