Physics ECAT Pre Engineering Chapter 4 Work and Energy

Sr	Questions	Answers Choice
1	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
2	A field in which the work done is moving a body along closed path is zero is called:	A. Nuclear filed B. Conservative field C. Gravitational field D. Non-conservative field
3	Work is a Quantity	A. Vector B. Scalar C. Non-physical D. None of these
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	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 10¹J B. +5 X 10²J C. +5 X 10³J D. +5 X 10⁴J
6	Work done is maximum when angle between force and displacement 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;">° B. 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;">° C. 180<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;">° D. None of these
7	The tidal energy is due to gravitational pull of :	A. sun B. moon C. Mars D. None of these
8	The field in which work done in moving a 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
9	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
10	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

11	Work done is maximum when angle between force and displacement is	A. 0° B. 90° C. 180° D. None of these
12	The work done 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
13	The types of mechanical energy is/are:	A. Kinetic energy B. Potential energy C. Both of these D. None of these
14	SI Unit of work is	A. Nm⁻¹ B. Joule C. Nms D. Both a and b
15	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
16	Which force is not a conservative force?	A. Frictional force B. Gravitational force C. Electric force D. Elastic spring force
17	When a falling body hits ground, its KE changes to _____ energy.	A. Potential B. Chemical C. Mechanical D. sound and heat
18	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
19	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°
20	The field in which work done is moving body between two points depends upon the path followed is called:	A. Conservative filed B. Non-conservative field C. Electric field D. None of these