Physics ECAT Pre Engineering Chapter 4 Work and Energy

Sr	Questions	Answers Choice
1	The value of escape velocity of Earth planet comes out to be:	A. 11 m/sec B. 11 km/sec C. 11 km/hour D. 11 cm/sec
2	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
3	Work done in lower and bucket into the well is:	A. Zero B. Positive C. Negative D. None of these
4	Which one is conservative force	A. Electric force B. Frictional force C. Normal force D. Air resistance
5	When a falling body hits ground, its KE changes to _____ energy.	A. Potential B. Chemical C. Mechanical D. sound and heat
6	Work has the dimension as that of:	A. Torque B. Angular momentum C. Linear momentum D. Power
7	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
8	The space around the earth within it exerts a force of attraction on other bodies of known as:	A. Nuclear field B. Conservative field C. Electric field D. Gravitational field
9	Which force is not a conservative force:	A. Frictional force B. Gravitational force C. Electric force D. Elastic spring force
10	The work done on the body will be zero if:	A. No force is applied on the body B. Force is applied but no displacement C. Angle between F(force) and d(displacement) is 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;">° D. All of these are correct
11	Area under the force displacement graph gives	A. Power B. Work C. Heat D. Energy
12	The tidal energy is due to gravitational pull of :	A. sun B. moon C. Mars D. None of these
13	If one newton force acts on a body and displaces the body through 1m work done on body is	A. 1 dyne B. 1 joule C. 1KJ D. 1 Watt

14	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°
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
16	The energy stored int he water of the dam is:	A. Electric energy B. Kinetic energy C. Potential energy D. None of these
17	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;">° 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;">° 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;">° 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;">°
18	When a body moves against the force of friction on a horizontal plane, the work done by the body is:	A. Positive B. Negative C. Zero D. None of these
19	Work is a scalar product of	A. Force, Velocity B. Velocity, Displacement C. Force, Displacement D. Force, Momentum
20	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