ECAT Physics Chapter 4 Work and Energy

Sr	Questions	Answers Choice
1	The power of an electric generating station is expressed in:	A. Kilo Jule B. Kilowatt-hour C. Kilo watt D. Watt
2	Work is product of:	A. Force and velocity B. Heat and energy C. Force and displacement D. None of these
3	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
4	SI Unit of work is	A. Nm⁻¹ B. Joule C. Nms D. Both a and b
5	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
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	Energy stored in the spring of a watch is called	A. Potential energy B. Kinetic energy C. Nuclear energy D. Elastic potential
8	A field in which the work done in moving a body along closed path is zero is called	A. Nuclear Field B. Conservative field C. Gravitational field D. Non-conservative field
9	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
		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-

10	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:	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;">°
11	Work has a dimension as that of:	A. Torque B. Angular momentum C. Linear momentum D. Power
12	Which of the following is not a unit of power:	A. J-sec B. Watt C. N m/sec D. Horsepower
13	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
14	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
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 unit of work in CGS system is	A. Joule B. Erg C. Dyne D. Watt
17	When force and displacement are perpendicular to each other than work is equal to	A. Unity B. Infinity C. Zero D. -Fd
18	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
19	A 100 kg car is moving at a speed of 10 m/sec and comes to rest after covering a distance of 50 m. the amount of work done against friction is:	A. +5 x 10¹J B. +5 x 10²J C. +5 x 10³J D. +5 x 10⁴J
20	Which one is conservative force	A. Electric force B. Frictional force C. Normal force D. Air resistance