MDCAT Physics Chapter 3 Work ,Energy & Power Online Test

Sr	Questions	Answers Choice
1	The same retarding force is applied to stop a train. The train stops after 80 m. If the speed is doubled, then the Stopping distance will be:	A. The same B. Doubled C. Halved D. Four times
2	A man weighing 500 N carries a load of 10 kg to the top of a building in 4 minutes. The work done by the man is 6 × □□^{4} J. If he carries the same load in 8 minutes, the work done by the man will be:	A. 3 × 10⁴ J B. 6 × 10⁴J C. 9 × 10⁴J D. 12× 10⁴ J
3	An elevator's motor produces 3000 W power. The speed With Which it can lift a 1000 kg load is:	A. 30.6ms⁻¹ B. 0.306ms⁻¹ C. 3.06ms⁻¹ D. 300.3ms⁻¹
4	Work done in raising a box depends on:	A. How fast it is raised B. The strength of the man C. The height by which it is raised D. None of the above
5	The energy stored in wound watch spring is	A. K.E. B. P.E. C. heat energy D. chemical energy
6	When a person lifts a body from ground work done by lifting force is?	A. Positive B. Negative C. Zero D. Half of positive maximum
7	. A force "F1" acts on a body through distance "S1" in the direction of motion and does work "W1". Similarly another force "F2" act on same body through distance "S2" but in opposite to the direction of motion and does work "W2". Now if F1 = F2 and S1 = S2 then which statement is correct.	A. W1 = W2 B. W2< W2 C. W1 > W2 D. W1 = W2= 0
8	Two bodies moving towards each other collide and move away in opposite directions. There is some rise in temperature of bodies because a part of the kinetic energy is converted into	A. heat energy B. electrical energy C. nuclear energy D. mechanical energy
9	You lift a heavy book from the floor of the room and keep it in the book-shelf having a height 2 m. In this process you take 5 seconds. The work done by you will depend upon:	A. Mass of the book and time taken B. Weight of the book and height of the book-shelf C. Height of the book-shelf and time taken D. Mass of the book, height of the book-shelf and time taken
10	If the K.E. of a body is increased by 300%, its momentum will increase by:	A. 100 % B. 150 % C. √300% D. 175 %
11	If the momentum of a body is increased n times, its kinetic energy increases:	A. n times B. 2 n times C. √□ times D. n 2 time
12	The time taken by an engine of power 10 kW to lift a mass of 200 kg to a heightof 40 m is (g + 10ms2)	A. 2 sec B. 4 sec C. 8 sec D. 16sec
13	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 joules, the angle which the force makes with the direction of motion of the body is?	A. 0 Degree B. 30 Degree C. 60 Degree D. 90 Degree
14	The power needed to lift amass of 5000g to height of 1min 2 second is	A. 2.45 watt B. 24.5 watt C. 245 watt D. 2.45 k watt
	A stone is thrown up from the surface of earth when it reaches at maximum height, its	A. mgh

15	total energy is equal to	B. 1/2 □□² C. zero D. 2mgh
16	The energy which an -e acquires when accelerated through a potential difference of 1 volt is called?	A. 1 Joule B. 1 Electron volt C. 1 Erg D. 1 Watt
17	An engine pumps out 40 kg of water in one second. The water comes out vertically upwards with a velocity of 3ms-1 . What is the power of engine in kilowatt?	A. 1.2kW B. 120kW C. 12kW D. 1200kW
18	A person holds a bucket of weight 60N. He walks 7 m along the horizontal path and then climbs up a vertical distance of 5 m. The work done by the man is:	A. 300 N-m B. 420 N-m C. 720 N-m D. none of these
19	If the stone is thrown up vertically and return to ground, its potential energy is maximum	A. during the upward journey B. during the upward journey C. at the maximum height D. at the bottom
20	The body at rest may have:	A. Energy B. Momentum C. Speed D. Velocity