MDCAT Physics Chapter 2 Work and energy Online Test

Sr	Questions	Answers Choice
1	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
2	Initially, four identical uniform blocks, each of mass m and thickness h, are spread on a table How much work is done on the blocks in stacking them on top of one another?	A. 2 mgh B. 3 mgh C. 4mgh D. 6mgh
3	An electric motor exerts a force of 40 N on a cable and pulls it by a distance of 30 m in one minute. The power supplied by the motor in watts is	A. 20 B. 200 C. 2 D. 10
4	A motor boat is travelling with a speed of 3.0 m/sec. If the force on it due to water flow is 500 N, the power of the boat is	A. 150 KW B. 1.5 KW C. heat energy D. chemical energy
5	The energy stored in wound watch spring is	A. K.E. B. P.E. C. heat energy D. chemical energy
6	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
7	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
8	If the K.E. of a body is increased by 300%, its momentum will increase by:	A. 100 % B. 150 % C. √300% D. 175 %
9	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
10	The body at rest may have:	A. Energy B. Momentum C. Speed D. Velocity
11	A light and a heavy body have equal momenta. Which one has greater K.E?	A. The light body B. The heavy body C. The K.E are equa D. Data is incomplete
12	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
13	Which of the following is a unit of energy?	A. unit B. whatt C. Horse Power D. None of the above
14	In an explosion a body breaks up into two pieces of unequal masses. In this:	A. Both parts will have numerically equal momentum B. Lighter part will have more momentum C. Heavier part will have more momentum D. Both parts will have equal kinetic energy

15	A 50 kg man with 20 kg load on his head climbs up 20 steps of 0.25 m height each. The work done in climbing is	A. 5 J B. 350 J C. 100 J D. 3430 J
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	A force □ = (□□̂+ □□̂) newton is applied over a particle which displaces it from its origin to the point □ = (□□̂– □□̂) meters. The work done on the particle is:	A. – 7 joules B. +13 joules C. + 7 joules D. +11 joules
18	A body of mass m kg is lifted by a man to a height of one meter in 30 sec. Another man lifts the same mass to the same height in 60 sec. The work done by them are in the ratio	A. 1: 2 B. 1: 1 C. 2: 1 D. 4: 1
19	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
20	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