MDCAT Physics Chapter 3 Work ,Energy & Power Online Test

Sr	Questions	Answers Choice
1	A man M_1 of mass 80 kg runs up a staircase in 15s. Another man M_2 also of mass 80 kg runs up the same staircase in 20s. The ratio of the power developed by them will be	A. 1 B. 4/3 C. 16/9 D. none of these
2	If the velocity of a body becomes half, the kinetic energy of body will become	A. One fourth B. Double C. Four times D. Half
3	The body at rest may have:	A. Energy B. Momentum C. Speed D. Velocity
4	Ratio of dimension of K.E and power is:	A. 1:1 B. T:1 C. 1:T D. M:J
5	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
6	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
7	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
8	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
9	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
10	The gravity does no work, when the body moves:	A. Horizontally B. Vertically upwards C. Vertically downward D. At an angle of 45o with horizontal
11	A man pushes a wall and fails to displace it. He does:	A. Negative work B. Positive but not maximum work C. No work at all D. Maximum work
12	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
13	A person weighing 20 mg walks on a level platform with a speed of 2 ms-1 . The work by the person against the force of gravity is:	A. Zero B. 2J C. 60J D. 600J
14	Which of the following work is greater?	A. + 100J B. 0 J C. - 100J D. Both A and B are equal
15	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

16	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
17	Kinetic energy of a body moving with speed of 10 ms-1 is 30 J. If its speed becomes30 ms-1 then its K.E becomes	A. 10J B. 270 J C. 90J D. 180 J
18	A force of 6 N act horizontally on a stationary mass of 2kg for 4s. The kineticenergy in joule is	A. 12 B. 72 C. 56 D. 888
19	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
20	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