MDCAT Physics Chapter 3 Work ,Energy & Power Online Test

Sr	Questions	Answers Choice
1	If the momentum of a body is increased n times, its kinetic energy increases:	A. n times B. 2 n times C. $\sqrt{\square}$ times D. n 2 time
2	A stone is thrown up from the surface of earth when it reaches at maximum height. its total energy is equal to	A. mgh B. $1/2 \square\square^2$ C. zero D. 2mgh
3	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
4	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
5	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
6	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
7	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
8	A force $\square = (\square\square\hat{} + \square\square\hat{})$ newton is applied over a particle which displaces it from its origin to the point $\square = (\square\square\hat{} - \square\square\hat{})$ meters. The work done on the particle is:	A. – 7 joules B. +13 joules C. + 7 joules D. +11 joules
9	The energy stored in wound watch spring is	A. K.E. B. P.E. C. heat energy D. chemical energy
10	3 joules of work is done in 3 seconds, then power is:	A. 6 watt B. 3 watt C. 18 watt D. 1 watt
11	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
12	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
13	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
14	The momentum of a particle is numerically equal to its K.E. What is the velocity of a particle?	A. 9 ms^{-1} B. 3 ms^{-1} C. 2 ms-1 D. 1 ms^{-1}

15	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
16	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
17	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
18	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
19	A bomb of mass 30 kg at rest explodes into two pieces of masses 18 kg and 12 kg. The velocity of 18 kg mass is 6 ms^1 The KE of other mass is	A. 324 J B. 256 J C. 245 J D. 524 J
20	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