

## Work, Energy and Power

Sr	Questions	Answers Choice
1	A car, an elephant and a cricket ball have same kinetic energies, Which of these have greater speed.	A. Car B. Cricket ball C. All have same speed D. Elephant
2	A ball weighing 50 N is lifted to a height of 5 metre. The potential energy stored in it is.	A. 25 J B. 250 J C. 55 J D. 45 J
3	The SI unit of power	A. erg B. Newton C. Watt D. Joule
4	The SI Unit of Power is	A. Watt B. Joule C. Newton D. Second
5	The unit of work or energy joule is equal to.....	A. Newton metre B. Horsepower C. Watt metre D. Newton second
6	The power of a water pump is 2 kW. The amount of water it can raise in one minute to a height of 5 meter is	A. 2400 litres B. 1000 litres C. 1200 litres D. 2000 litres
7	Work done is maximum when the angle between the force F and the displacement d is	A. $60^\circ$ B. $30^\circ$ C. $0^\circ$ D. $90^\circ$
8	Which one is renewable source of	A. Coal B. Uranium C. Sunlight D. Natural gas
9	A bullet of mass 0.05 kg has a speed of 300 ms <sup>-1</sup> . Its kinetic energy will be.	A. 2250 J B. 4500 J C. 1500 J D. 1125 J
10	A heavy and a lighter object have same momentum. The object with greater kinetic energy is.	A. Heavy B. Lighter C. Same kinetic energy D. Either a or b
11	Which of the following is not renewable energy source.	A. Fossil fuels B. Hydroelectric energy C. Wind energy D. Solar energy
12	The magnitude of momentum of an object is doubled. the kinetic energy of the object will	A. Double B. Increase to four times C. Reduce to one half D. Remain the same
13	A weight lifter of power 1960 watt lifts a load of mass 'M' from the ground to a height of 2 m in 3 second 'M' is.	A. 200 kg B. 100 kg C. 400 kg D. 300 kg
14	A force is acting on body but causes no displacement. The work done on the body is	A. Negative B. Zero C. Positive D. Infinite
15	A Joule can also be written as.	A. kgms <sup>-2</sup> B. kgms <sup>-1</sup> C. kgms <sup>-2</sup> S <sup>-2</sup> D. kgms <sup>-2</sup>

D.  $3 \times 10^3$  kgms<sup>-2</sup>

16 The type of energy derived from heated ground water is

- A. Tidal energy
- B. Hydroelectric energy
- C. Nuclear energy
- D. Geothermal energy

17 A box is taken to the second floor at a building by doing some work. This work converts to.

- A. Kinetic energy
- B. Heat energy
- C. Potential energy
- D. Sound energy

18 A Partical enegine cannot have an efficiency equal to.

- A. 0
- B. 1
- C. 0.8
- D. 0.5

19 What is the power utilized when 100 J of work is done in 5 s. 10 W

- A. 10 W
- B. 500 W
- C. 20 W
- D. 105 W

20 The energy possessed by a body by virtue of its position is.

- A. Solar energy
- B. Chemical energy
- C. Potential energy
- D. Kinetic energy