

Work, Energy and Power

| Sr | Questions | Answers Choice |
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| 1 | The SI unit of power | A. erg B. Newton C. Watt D. Joule |
| 2 | 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 |
| 3 | A Joule can also be written as. | A. kgms^{-2} B. kgms^{-1} C. $\text{kgms}^{-2}\text{S}^{-2}$ D. $\text{kgms}^{-2}\text{S}^{-3}$ |
| 4 | A Partical engine cannot have an efficiency equal to. | A. 0 B. 1 C. 0.8 D. 0.5 |
| 5 | 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 |
| 6 | Which of the following is not renewable energy source. | A. Fossil fuels B. Hydroelectric energy C. Wind energy D. Solar energy |
| 7 | 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 |
| 8 | If a car doubles its speed, its kinetic energy will be | A. Increased to four times B. The same C. Doubled D. Increased to the three times |
| 9 | Which one is renewable source of | A. Coal B. Uranium C. Sunlight D. Natural gas |
| 10 | One unit of horsepower is equivalent | A. 716 W B. 746 W C. 736 W D. 756W |
| 11 | The type of energy derived from heated ground water is | A. Tidal energy B. Hydroelectric energy C. Nuclear energy D. Geothermal energy |
| 12 | Work done is maximum when the angle between the force F and the displacement d is | A. 60° B. 30° C. 0° D. 90° |
| 13 | 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 |
| 14 | The unit of work or energy joule is equal to..... | A. Newton metre B. Horsepower C. Watt metre D. Newton second |
| 15 | A bullet of mass 0.05 kg has a speed of 300 ms ⁻¹ . Its kinetic energy will be. | A. 2250 J B. 4500 j C. 1500 J D. |

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| | | D. 1125 J |
| 16 | The energy possessed by a body by virtue of its position is. | A. Solar energy B. Chemical energy C. Potential energy D. Kinetic energy |
| 17 | A 4 kg body is thrown vertically upward from the ground with a velocity of 5 ms ⁻¹ . If friction is neglected its kinetic energy just before hitting the ground is. | A. 25 J B. 100 J C. 50 J D. 75 J |
| 18 | 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 |
| 19 | A ball is thrown downward with an initial velocity, its. | A. Ek increases and Ep decreases B. Ek decreases and Ep increases C. Both Ek and Ep increases D. Both Ek and Ep decreases |
| 20 | The SI Unit of Power is | A. Watt B. Joule C. Newton D. Second |
| 21 | 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 |
| 22 | 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 |
| 23 | 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 |
| 24 | 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 |