

Physics Fsc Part 1 Chapter 4 Online Test

Sr	Questions	Answers Choice
1	A dry battery can deliver 3000 J of energy to a 2 W small electric motor before the battery is exhausted. For how many minutes does the battery run?	<p>A. 1500 min</p> <p>B. 100 min</p> <p>C. 25 min</p> <p>D. 50 min</p>
2	If an agent consumes a power of 1 kW in one hour the work done is.	<p>A. One megawatt hour</p> <p>B. One kilowatt hour</p> <p>C. One deciwatt hour</p>
3	The consumption of energy by a 60 watt bulb in 2 seconds is	<p>A. 130 J</p> <p>B. 120 J</p> <p>C. 160 J</p> <p>D. 0.02 J</p>
4	A force of 10 N is required to overcome road friction and air resistance in propelling an automobile at 30 m/sec. power developed by the engine.	<p>A. 600 W</p> <p>B. 400 W</p> <p>C. 300 W</p> <p>D. 500 W</p>
5	Gravity performs zero work when body moves	<p>A. Vertically</p> <p>B. Horizontally</p> <p>C. At 60% with vertical</p> <p>D. At 45% with horizontal</p>
6	Ratio of dimension of power and K.E. is.	<p>A. 1 : 1</p> <p>B. T : 1</p> <p>C. 1 : T</p> <p>D. M : T</p>
7	The height above the ground of a child on a swing varies from 0.5 m of his lowest point to 1.5 m at his highest point. The maximum speed of the child is approximately.	<p>A. 1.5 ms⁻¹</p> <p>B. 4.4 ms⁻¹</p> <p>C. 9.8 ms⁻¹</p> <p>D. Depends upon child's mass</p>
8	1 kilowatt is equal=	<p>A. 1000 J/S</p> <p>B. 106 Watt</p> <p>C. 0.1 x 10² watt</p> <p>D. 6.25 x 10²⁵ J</p>
9	Power can be defined as the scalar product of.	<p>A. force and displacement</p> <p>B. Force and velocity</p> <p>C. Force and time</p> <p>D. Force and mass</p>
10	A 1 kg mass has potential energy of 1 joule relative to the ground when it is at a height of.	<p>A. 0.102 m</p> <p>B. 1 m</p> <p>C. 9.8 m</p> <p>D. 32 m</p>
11	Kilowatt hour is unit is.	<p>A. Power</p> <p>B. Work</p> <p>C. Force</p> <p>D. Momentum</p>
12	When a ball is thrown vertically upward and then falls back to the ground, which force can be considered conservative in this scenario.	<p>A. Air resistance</p> <p>B. Gravity</p> <p>C. Friction between ball and air</p> <p>D. Constant force with hand</p>
13	According to work energy principle in linear motion. the work done on one body is equal to.	<p>A. Change in K.E.</p> <p>B. Change in P.E.</p> <p>C. Zero</p> <p>D. Sum of K.E and P.e</p>
14	If P= Pressure, delta V = change in volume, P delta V represents.	<p>A. Density</p> <p>B. Work</p> <p>C. Temperature</p> <p>D. Power</p>

15 The kinetic energy acquired by a distance from rest under the action of a constant force is directly proportional to.

- A. $\propto t^2$
- B. $\propto t$
- C. $\propto \frac{1}{t}$
- D. Independent of t

16 When the force is parallel to the direction of motion of the body the work done is.

- A. Minimum
- B. Maximum
- C. Infinity
- D. Zero

17 Which one of the following is/are correct.

- A. Work is positive if $0 < \theta < 90^\circ$
- B. Work is 0 if $\theta = 90^\circ$
- C. Work is negative if $90^\circ < \theta < 180^\circ$
- D. All of these

18 1 kilowatt is equal to

- A. 1000 J/s
- B. 106 watt
- C. 0.1×10^3 Watt
- D. 6.25×10^{25} Watt

19 A body at rest may have.

- A. Speed
- B. Energy
- C. Velocity

D. \times Momentum

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If the velocity of the body becomes double and mass become half then K.E.

A. \times Becomes double

B. \times Beomes for time

C. \times In halved

D. \times Becomes eight time