

Physics ICS 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 style="color: green;">C. 25 min</p> <p>D. 50 min</p>
2	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 style="color: green;">A. 600 W</p> <p>B. 400 W</p> <p>C. 300 W</p> <p>D. 500 W</p>
3	Escape velocity depends upon.	<p>A. Mass of the body</p> <p>B. Radius of the body</p> <p style="color: green;">C. Radius of the planet</p> <p>D. Radius of the Earth</p>
4	Gravity performs zero work when body moves	<p>A. Vertically</p> <p style="color: green;">B. Horizontally</p> <p>C. At 60% with vertical</p> <p>D. At 45% with horizontal</p>
5	A 1 kg mass has potential energy of 1 joule relative to the ground when it is at a height of.	<p style="color: green;">A. 0.102 m</p> <p>B. 1 m</p> <p>C. 9.8 m</p> <p>D. 32 m</p>
6	Kilowatt hour is unit is.	<p>A. Power</p> <p style="color: green;">B. Work</p> <p>C. Force</p> <p>D. Momentum</p>
7	The dimension of power	<p style="color: green;">A. $[ML^2 T^{-3}]$</p> <p>B. $[ML^{-1} T^{-1}]$</p> <p>C. $[ML^2 T^2]$</p> <p>D. $[ML^{-2} T^{-4}]$</p>
8	1 kilowatt is equal =	<p style="color: green;">A. 1000 J/s</p> <p>B. 106 watt</p> <p>C. 0.1×10^3 Watt</p> <p>D. 6.25×10^{25} Watt</p>
9	When the force is parallel to the direction of motion of the body the work done is.	<p>A. Minimum</p> <p style="color: green;">B. Maximum</p> <p>C. Infinity</p> <p>D. Zero</p>
10	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 style="color: green;">B. Gravity</p> <p>C. Friction between ball and air</p> <p>D. Constant force with hand</p>
11	If $P = \text{Pressure}$, $\Delta V = \text{change in volume}$, $P \Delta V$ represents.	<p>A. Density</p> <p style="color: green;">B. Work</p> <p>C. Temperature</p> <p>D. Power</p>
12	If $P = \text{pressure}$, $\Delta V = \text{change in volume}$, $P \Delta V$ represents	<p style="color: green;">A. Work</p> <p>B. Density</p> <p>C. Power</p> <p>D. Temperature</p>
13	Two bodies A and B of mass 1 kg and 2 kg respectively have same momentum. Which one has greater KE.	<p>A. Cannot be determined</p> <p style="color: green;">B. A</p> <p>C. B</p> <p>D. Both have the same K.E.</p>
14	If an agent consumes a power of 1 kW in one hour the work done is.	<p>A. One megawatt hour</p> <p style="color: green;">B. One kilowatt hour</p> <p>C. One deciwatt hour</p>

- 15 An iron sphere whose mass is 30 kg has the same diameter as an aluminium sphere whose mass is 10.5 kg. The spheres are simultaneously dropped from a cliff. When they are 10 m from the ground, they have identical.
- A. Accelerations
B. Momentums
C. Potential energies
D. Kinetic energies
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- 16 A body of mass 0.2 kg initially moving with velocity 10 m/s comes to rest in 1 m. how much retarding force acts on it.
- A. 10 N
B. 20 N
C. 40 N
D. 200 N
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- 17 1 kilowatt is equal=
- A. 1000 J/S
B. 106 Watt
C. 0.1×10^{25} watt
D. 6.25×10^{25} J
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- 18 Ratio of dimension of power and K.E. is.
- A. 1 : 1
B. T : 1
C. 1 : T
D. M : T
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- 19 The dimension of power is.
- A. $[ML^2 T^{-3}]$
B. $[ML^{-1} T^{-1}]$
C. $[ML^2 T^2]$
D. $[ML^{-2} T^{-4}]$
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- 20 Absolute P.E. of a body of mass "m" at a distance "r" from earth centre is.
- A. $[-GM/r]$
B. $- Gr/ M$
C. $-Gmr$
D. GmM /r