

Physics ICS Part 1 Chapter 4 Online Test

Sr	Questions	Answers Choice
1	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>
2	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. Contact force with hand</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	1 kilowatt is equal =	<p>A. 1000 J/s</p> <p>B. 106 watt</p> <p>C. $0.1 \times 10^3 \text{ Watt}$</p> <p>D. $6.25 \times 10^{25} \text{ Watt}$</p>
5	Power of lamp is 6 W. How much energy does a lamp give out in 2 min?	<p>A. 12 J</p> <p>B. 720 J</p> <p>C. 20 J</p> <p>D. 3 J</p>
6	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.	<p>A. Accelerations</p> <p>B. Momentums</p> <p>C. Potential energies</p> <p>D. Kinetic energies</p>
7	1 kilowatt is equal=	<p>A. 1000 J/S</p> <p>B. 106 Watt</p> <p>C. $0.1 \times 10^2 \text{ watt}$</p> <p>D. $6.25 \times 10^{25} \text{ J}$</p>
8	Absolute P.E. of a body of mass "m" at a distance "r" from earth centre is.	<p>A. $[-GM/r]$</p> <p>B. $[-Gr/ M]$</p> <p>C. $[-Gmr]$</p> <p>D. $[GmM /r]$</p>
9	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.	<p>A. 10 N</p> <p>B. 20 N</p> <p>C. 40 N</p> <p>D. 200 N</p>
10	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>B. A</p> <p>C. B</p> <p>D. Both have the same K.E.</p>
11	If a body mass 2 kg is raised vertically through 2 m then the work done will be.	<p>A. 50 J</p> <p>B. 39.2 J</p> <p>C. 35 J</p> <p>D. 40 J</p>
12	If P= Pressure, ΔV = change in volume, P ΔV represents.	<p>A. Density</p> <p>B. Work</p> <p>C. Temperature</p> <p>D. Power</p>
13	If the velocity of the body becomes double and mass become half then its K.E.	<p>A. Becomes double</p> <p>B. Becomes for time</p> <p>C. In halved</p> <p>D. Becomes eight time</p>
14	A body at rest may have.	<p>A. Speed</p> <p>B. Energy</p> <p>C. Velocity</p>

C. μv
D. Momentum

15 Kilowatt hour is unit is.

- A. Power
- B. Work
- C. Force
- D. Momentum

16 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.

- A. 1.5 ms^{-1}
- B. 4.4 ms^{-1}
- C. 9.8 ms^{-1}
- D. Depends upon child's mass

17 According to work energy principle in linear motion, the work done on one body is equal to.

- A. Change in K.E.
- B. Change in P.E.
- C. Zero
- D. Sum of K.E and P.e

18 Escape velocity depends upon.

- A. Mass of the body
- B. Radius of the body
- C. Radius of the planet
- D. Radius of the Earth

19 Which of the following is non conservative force.

- A. Elastic spring force
- B. Electric force
- C. Gravitational force
- D. Tension in string

20 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