Physics General Science Test Hard Mode

Sr	Questions	Answers Choice
1	Radio waves of constant amplitude can be generated with	A. Rectifier B. Filter C. FET D. Oscillator
2	The number of translation degrees of freedom for a diatomic gas is	A. 2 B. 3 C. 5 D. 6
3	How much water a pump of 2kW can raise in one minute to a height of 10 m. take g = 10 m/s^2?	A. 1000 liters B. 1200 liters C. 100 liters D. 2000 liters
4	The initial velocity of a body moving along a straight line in 7 m/s. It has a uniform acceleration of 4 m/s^2. The distance covered by the body in the 5th second of its motion is	A. 25 m B. 35 m C. 50 m D. 85 m
5	Which of the following four statements is false?	A. A body can have zero velocity and still be accelerated B. A body can have a constant velocity and still have a varying speed C. A body can have a constant speed and still have a varying velocity D. The direction of the velocity of a acceleration is constant
6	The modulus of rigidity of a liquid is	A. Zero B. 1 C. Infinity D. A value not one of those mentioned above
7	In which case dose the potential energy decreases?	A. On compressing a spring B. On stretching s spring C. One moving a body against gravitational force D. One the rising of an air bubble in water
8	The fundamental unit which has same power in the dimensional formula of surface tension and viscosity is:	A. Mass B. Length C. Time D. None
9	One cannot see through fog because	A. Fog absorbs light B. The refractive index of fog is infinity C. Light suffers total reflection at the droplet in a fog D. Light is scattered by the droplets in fog
10	A person standing near the track of a fast moving train has tendency to fall towards it because of	A. Vibration due to motion of train B. Gravitation force of attraction between person and trains C. The high speed of train D. Some other effect
11	If the metal bob is a simple pendulum is replaced by a wooden bob, then its time period will	A. Increase B. Decreases C. Remain the same D. First 'A' then 'B'
12	If a diamagnetic substance is brought near north or south pole of a bar magnet it is	A. Attracted by the poles B. Repelled by the poles C. Repelled by north pole and attracted by the south pole D. Attracted by the north pole and repelled by the south pole
		A. The fact that stars do not emit light

13	The twinkling of stars is due to	continuously B. The refractive index of the earth's atmosphere fluctuate C. Intermittent absorption of star light by its own atmosphere D. None of them
14	When the displacement is half of the amplitude the ratio of potential energy to the total energy is	A. 1/2 B. 1/4 C. 1 D. 1/8
15	Which of the following is equal to: joule x ohm / volt x second ?	A. Ampere B. Volt C. Watt D. Tesla
16	To get a resultant displacement of 10 m, two displacement vectors of magnitude 6 m and 8 m should be combined	A. Parallel B. Antiparallel C. At angle 60° D. Perpendicular to each other
17	A body moving in circular motion with constant speed has	A. Constant velocity B. Constant acceleration C. Constant kinetic energy D. Constant displacement
18	The de broglie wave corresponding to a particle of mass m and velocity v has a wavelength associated with it	A. h/mv B. hm v C. mh/v D. m/hv
19	At 0° K which of the following properties of a gas will be zero?	A. Kinetic energy B. Potential energy C. Vibrational enegy D. Density
20	The average power dissipation in a pure capacitor in AC circuit is	A. 1/2 CV² B. CV² C. 2CV² D. Zero