

Physics General Science Test Hard Mode

Sr	Questions	Answers Choice
1	Blood has a density	A. Equal to water B. Greater than water C. Lesser than water D. None of these
2	Radio waves of constant amplitude can be generated with	A. Rectifier B. Filter C. FET D. Oscillator
3	According to Stoke's law drag force depends on	A. Initial velocity B. Final velocity C. Terminal velocity D. Instantaneous velocity
4	If 2.2 kilowatt power is transmitted through a 10 ohm line at 22000 volt, the power loss in the form of heat will be	A. 0.1 watt B. 1 watt C. 10 watt D. 100 watt
5	The velocity of a particle at an instant is 10 m/s and after 5 s the velocity of the particle is 20 m/s. The velocity 3 s before in m/s is:	A. 8 B. 4 C. 6 D. 7
6	Two forces of 10N and 15N are acting simultaneously on an object in the same direction. Their resultant is	A. Zero B. 5N C. 25N D. 150N
7	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
8	What is the ratio of r.m.s velocity for O ₂ to H ₂ ?	A. 1/4 B. 4 C. $\sqrt{4}$: 1 D. 1 : $\sqrt{4}$
9	Huygen's wave theory of light cannot explain	A. Diffraction B. Interference C. Polarization D. Photoelectric effect
10	Which of the following is the only vector quantity	A. Temperature B. Energy C. Power D. Momentum
11	The smooth or steady stream-line flow is known as	A. Laminar flow B. Turbulent flow C. Both a and b D. None of the above
12	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
13	Copper and germanium are cooled to 70 K from room temperature then	A. Resistance of copper increases while that of germanium decreases B. Resistance of copper decreases while that of germanium increases C. Resistance of both decreases D. Resistance of both increases
		A. Potential energy B. Kinetic energy

14	What remains constant in the field of central force?	B. Kinetic energy C. Angular momentum D. Linear momentum
15	A monochromatic source of light is placed at a large distance d from a metal surface. Photoelectrons are ejected at rate n , kinetic energy being E . If the source is brought nearer to distance $d/2$, the rate and kinetic energy per photoelectron become nearly	A. $2n$ and $2E$ B. $4n$ and $4E$ C. $4n$ and E D. N and $4E$
16	If the earth were to rotate faster than its present speed the weight of an object will	A. Increase at the equator but remain unchanged at the poles B. Decrease at the equator but remain unchanged at the poles C. Remain unchanged at the decrease but decrease at the poles D. Remain unchanged at the equator but increase at the poles
17	In a voltmeter the conduction takes place due to	A. Electrons only B. Holes only C. Electrons and holes D. Electrons and ions
18	Velocity of sound in a diatomic gas is 300 m/sec what is its rms velocity	A. 400 m/sec B. 40 m/sec C. 430 m/sec D. 300 m/sec
19	The dot product of two vectors is negative when	A. They are parallel vectors B. They are anti-parallel vectors C. They are perpendicular vectors D. None of the above is correct
20	What will be the ratio of the distance moved by a freely falling body from rest in 4 th and 5 th seconds of journey?	A. 4 : 5 B. 7 : 9 C. 16 : 25 D. 1 : 1