

Physics General Science Test Hard Mode

Sr	Questions	Answers Choice
1	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
2	The acceleration 'a' in m/s^2 of a particle is given by $a = 3 t^2 + 2 t + 2$, where 't' is the time if the particle starts out with a velocity $v = 2 m/s$ at $t = 0$, then the velocity at the end of 2 second is	A. 12 m/s B. 24 m/s C. 18 m/s D. 36 m/s
3	An ideal choke (used along with fluorescent tube) would be	A. A pure resistor B. A pure capacitor C. A pure inductor D. A combination of an inductor and a capacitor
4	Which one of the following phenomena is not explained by Huygen's construction of wavefront?	A. Refraction B. Reflection C. Diffraction D. Origin of spectra
5	Absolute temperature can be calculated by	A. Mean square velocity B. Motion of the molecule C. Both (A) and (B) D. None of these
6	The dimensional formula for the modulus of elasticity is same as that for.	A. Stress B. Strain C. Velocity D. Surface tension
7	The excess (equal in number) of electrons that must be placed on each of two small spheres spaced 3 cm apart. with force of repulsion between the spheres to be $10^{-19} N$ is	A. 25 B. 225 C. 625 D. 1250
8	The sieman is the SI unit of	A. Resistance B. Specific Resistance C. Conductance D. Inductance
9	The number of translation degrees of freedom for a diatomic gas is	A. 2 B. 3 C. 5 D. 6
10	A body moving in circular motion with constant speed has	A. Constant velocity B. Constant acceleration C. Constant kinetic energy D. Constant displacement
11	When boron is added as an impurity to silicon the resulting material is	A. n type conductor B. n type semiconductor C. p-type conductor D. p-type semiconductor
12	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
13	Energy is stored in the choke coil in the form of	A. Heat B. Magnetic energy C. Electric energy D. Electro -magnetic energy
14	Blood has a density	A. Equal to water B. Greater then water C. Lesser then water D. None of these

15	The average power dissipation in a pure capacitor in AC circuit is	B. CV^2 C. $2CV^2$ D. Zero
16	At constant volume temperature is increased then	A. Collision on walls will be less B. Number of collisions per unit time will increase C. Collisions will be in straight lines D. Collisions will not change
17	A ten-ohm electric heater operates on a 110 V line Calculate the rate at which it develops heat in watts:	A. 1310 W B. 670 W C. 810 W D. 1210 W
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	The motion without consideration of its cause is studied in:	A. Kinematics B. Mechanics C. Statics D. Modern Physics
20	If the dot product of two non-zero vectors vanishes the vectors will be	A. In the same direction B. Opposite to each other C. Perpendicular to each other D. Zero