

Physics General Science Test Hard Mode

Sr	Questions	Answers Choice
1	Which of the following is a scalar quantity	A. Density B. Displacement C. Torque D. Weight
2	At 0° K which of the following properties of a gas will be zero?	A. Kinetic energy B. Potential energy C. Vibrational energy D. Density
3	The sieman is the SI unit of	A. Resistance B. Specific Resistance C. Conductance D. Inductance
4	A bullet is shot from a rifle. As a result the rifle recoils, The kinetic energy of rifle as compared to that of bullet is	A. Less B. Greater C. Equal D. Cannot be concluded
5	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
6	A couple produces	A. Purely linear motion B. Purely rotational motion C. Linear and rotational motion D. No motion
7	Radio waves of constant amplitude can be generated with	A. Rectifier B. Filter C. FET D. Oscillator
8	In a common base transistor circuit the current gain is 0.98. On changing the emitter current by 5.00 mA, the change in collector current is:	A. 0.196 mA B. 2.45 mA C. 4.9 mA D. 5.1 mA
9	A motorist travels A to B at a speed of 40 km/h and returns at speed of 60 km/h. His average speed will be:	A. 40 km/h B. 48 km/h C. 50 km/h D. 60 km/h
10	A moving charge will gain energy due to the application of	A. Electric field B. Magnetic C. Both of these D. None of these
11	Boyle's law is applicable in	A. Isochoric process B. Isothermal process C. Isobaric process D. Isotonic process
12	A sun rise or sun set, the sun looks reddish because.	A. The sun is coldest at these times B. Of the effects of reflection and refraction C. The sun is hottest at these times D. Of the scattering of light
13	When n-type of semiconductor is heated	A. Number of electrons increases while that of holes decreases B. Number of holes increases while that of electrons decreases C. Number of electrons and holes remains same D. Number of electrons and holes increases equally
14	The frequency of the incident light falling on a photosensitive metal plate is doubled the kinetic energy of the emitted photoelectrons is	A. Double the earlier value B. Unchanged C. More than doubled D. Less than doubled

15	The motion without consideration of its cause is studied in:	A. Kinematics B. Mechanics C. Statics D. Modern Physics
16	With the increase of temperature viscosity	A. Increase B. Decrease C. Remains same D. Doubles
17	A body of mass 2 kg is thrown up vertically with K.E of 490 joules If the acceleration due to gravity is 9.8 m/s^2 the height at which the K.E of the body becomes half its original value is give by:	A. 50 m B. 12.5 m C. 25 m D. 10 m
18	At a certain instant a stationary transverse wave is found to have maximum kinetic energy the appearance of string of that instant is:	A. Sinusoidal shape with amplitude $A/3$ B. Sinusoidal shape with amplitude $A/2$ C. Sinusoidal shape with amplitude A D. Straight line
19	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
20	The average power dissipation in a pure capacitor in AC circuit is	A. $\frac{1}{2} CV^2$ B. CV^2 C. $2CV^2$ D. Zero