

Physics General Science Test Hard Mode

Sr	Questions	Answers Choice
1	The velocity of falling raindrops attains limited value because of	A. Up thrust of air B. Viscous force exerted by air C. Surface tension effect D. Air currents atmosphere
2	According to the Hooke's law the force required to change the length of a wire by '1' is proportional to	A. 1^{-2} B. 1^{-1} C. 1 D. 1^{2}
3	A cable breaks if stretched by more than 2 mm it is cut into two equal parts how much either part can be stretched without breaking?	A. 0.25 m B. 0.5 m C. 1 mm D. 2 mm
4	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'
5	A moving charge will gain energy due to the application of	A. Electric field B. Magnetic C. Both of these D. None of these
6	The minimum wavelength of the X-rays produced by electrons accelerated through a potential difference of V volts is directly proportional to	A. \sqrt{V} B. V^{2} C. $1/\sqrt{V}$ D. $1/V$
7	A (100 W, 200 V) bulb is connected to a 160 V power supply. The power consumption would be	A. 64 W B. 80 W C. 100 W D. 125 W
8	What will be the duration of the day and night (in hour) if the diameter of the earth is suddenly reduced to half its original value the mass remaining constant?	A. 12 B. 6 C. 3 D. 2
9	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
10	A point charge Q is placed at the mid-point of a line joining two charges 4q and q. if the net force on charge q is zero. then Q must be equal to	A. -q B. +q C. -2q D. +4q
11	Which of the following is equal to: joule x ohm / volt x second ?	A. Ampere B. Volt C. Watt D. Tesla
12	A wire is stretched to double of its length. The strain is	A. 2 B. 1 C. Zero D. 0.5
13	In an AC circuit a resistance of R ohm is connected in series with an inductance L if phase angle between voltage and current be 45° the value of inductive reactance will be	A. R/4 B. R/2 C. R
14	If the period of oscillation of mass (M) suspended from a spring is 2s, then the period of mass 4M will be	A. 1 s B. 2 s C. 3 s D. 4 s
15	Two sources of sound are said to be coherent if	A. They produce sounds of equal intensity B. They produce sounds of equal frequency C. They produce sound waves

vibrating with the same phase
D. They produce sound waves with zero or constant phase difference all instant of time

16	The henry is the unit for	A. Resistance B. Magnetic flux C. Magnetic field D. Inductance
17	Planck's constant has the dimensions of:	A. Energy B. Momentum C. Frequency D. Angular momentum
18	A voltmeter has resistance of 2000 ohms and it can measure up to 2V. If we want to increase its range to 10V then required resistance in series will be	A. 2000 Ω B. 4000 Ω C. 6000 Ω D. 8000 Ω
19	If two non-zero vector \vec{A} and \vec{B} are parallel to each other, then $\vec{A} \cdot \vec{B}$ is equal to	A. Zero B. AB C. $A + B$ D. $A - B$
20	Mechanical waves on the surface of a liquid are	A. Transverse B. Longitudinal C. Torsional D. Both transverse and longitudinal