Physics General Science Test Hard Mode

Sr	Questions	Answers Choice
1	A train of 150 m length is going towards north direction at a speed of 10 ms^{-1} A parrot flies at a speed of 5 ms^{-1} towards south direction parallel to the railway track,The time taken by the parrot to cross the train is equal to	A. 12 s B. 8 s C. 15 s D. 10 s
2	If two non-zero vector $\overline{A}$ and $\overline{B}$ are parallel to each other, then $\overline{A}, \overline{B}$ is equal to	A. Zero B. AB C. A + B D. A - B
3	A moving charge will gain energy due to the application of	A. Electric field B. Magnetic C. Both of these D. None of these
4	Surface tension of water is due to	A. Inter molecular attraction B. Intermolecular spaces C. Inter molecular repulsion D. None of above
5	When a hydrogen atom is bombarded the atom is excited to the n = 4 state of hydrogen atom.The energy released when the atom falls from n = 4 state to the ground state is	A. 1.275 eV B. 12.75 eV C. 5 eV D. 8 eV
6	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'
7	Light appears to travel in straight lines since	A. It is not absorbed by the atmosphere B. It is reflected by the atmosphere C. Its wavelength is very small D. Its velocity is very large
8	Velocity of sound in a diatomic as 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
9	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
10	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
11	The henry is the unit for	A. Resistance B. Magnetic flux C. Magnetic field D. Inductance
12	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
13	Electrons in the atom are held in the atom due to	A. Coulomb forces B. Nuclear forces C. Gravitational forces D. Van der Waal's forces
14	In case of p-n junction diode at high value of reverse bias the current rises sharply The value of reverse bias is known as	A. Cut off voltage B. Zener voltage C. Inverse voltage D. Critical voltage
		A. 0.1 watt

15	If 2.2 kilowatt power is transmitted through a 10 ohm line at 22000 volt, the power loss in he form of heat will be	B. 1 watt C. 10 watt D. 100 watt
16	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
17	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
18	The magnetic moment of a circular coil carrying current is	A. Directly proportional to the length of the wire in the coil B. Inversely proportional to the length of the wire in the coil C. Directly proportional to the square of the length of the wire in the coil D. Inversely proportional to the square of the length of the wire in the coil
19	Bernoulli's equation is based upon law of conservation	A. Mass B. Momentum C. Energy D. None of these
20	Which of the following particle would experience the largest magnetic force when projected with the same velocity perpendicular to a magnetic field?	A. Proton B. Electron C. He⁺ D. Li⁺