

Physics General Science Test Hard Mode

Sr	Questions	Answers Choice
1	With the increase of temperature viscosity	A. Increase B. Decrease C. Remains same D. Doubles
2	A particle moves along a circular path under the action of a force. The work done by the force is	A. Zero B. Positive and non-zero C. Negative and non zero D. None of above
3	The modulus of rigidity of a liquid is	A. Zero B. 1 C. Infinity D. A value not one of those mentioned above
4	Blood has a density	A. Equal to water B. Greater then water C. Lesser then water D. None of these
5	If in a moving coil galvanometer a current 1 produces a deflection θ then	A. $i \propto \tan \theta$ B. $i \propto \theta^2$ C. $i \propto \theta$ D. $i \propto \sqrt{\theta}$
6	In a capacitive circuit	A. Current leads voltage by phase of $\pi/2$ B. Voltage leads current by phase of $\pi/2$ C. Current and voltage are in same phase D. Sometime current and sometime voltage leads
7	A photocell with a constant p.d of V volt across it illuminated by a point source from a distance of 25 cm. When the source is moved to a distance of 1 m, the electrons emitted by the photocell	A. Carry 1/4th their previous energy B. Are 1/6th as numerous as before C. Are 1/4th as numerous as before D. Carry 1/4th their previous momentum
8	To explain his theory Bohr used	A. Conservation of linear momentum B. Conservation of angular momentum C. Conservation of quantum frequency D. Conservation of energy
9	A motorist travels A to B at a speed at 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	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
11	What remains constant in the field of central force?	A. Potential energy B. Kinetic energy C. Angular momentum D. Linear momentum
12	The unit of inductance is equivalent to	A. $V \times s/A$ B. $V \times A/s$ C. $A \times s/v$ D. $V/A \times s$
13	In case of p-n junction diode at high value of reverse bias the current rises sharply The	A. Cut off voltage B. Zener voltage

	value of reverse bias is known as	C. Inverse voltage D. Critical voltage
14	Surface tension of water is due to	A. Inter molecular attraction B. Intermolecular spaces C. Inter molecular repulsion D. None of above
15	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
16	Boyle's law is applicable in	A. Isochoric process B. Isothermal process C. Isobaric process D. Isotonic process
17	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
18	Which of the modulus of elasticity is involved in compressing a rod to decrease its length?	A. Young's modulus B. Bulk modulus C. Modulus of rigidity D. None of the above
19	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
20	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. $+4q$