Physics General Science Test Hard Mode

Sr	Questions	Answers Choice
1	Two points charges A and B separated by a distance R attract each other with a force of 12 x 10^{-3} N. The force between A and B when the charges on them are doubled and distance is halved	A. 1.92 N B. 19.2 N C. 12 N D. 0.192 N
2	Who explained the origin of the Fraunhofer lines?	A. Fraunhoffer B. Kirchhoff C. Fresnel D. Snell
3	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
4	Two forces are acting together on an object. The magnitude of their resultant is minimum when the angle between the force is.	A. 0° B. 60° C. 120° D. 180°
5	A body moving in circular motion with constant speed has	A. Constant velocity B. Constant acceleration C. Constant kinetic energy D. Constant displacement
6	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
7	The peak voltage in a 200 volt A.C supply is nearly	A. 220 B. 253 C. 311
8	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
9	In which case application of angular velocity is useful?	A. When a body is rotating B. When velocity of body is in a straight line C. When velocity is in a straight line D. None of these
10	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
11	Two electric bulbs of 200 W and 100 W have same voltage.If R1 and R2 be their resistance respectively then	A. R₁ = 2R₂ B. R₂ = 2R₁ C. R₂ = 4R₁ D. R₁ = 4R₂
12	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
		A. √m₁ : √m₂ B. <span style="font-size:

13	Two bodies of masses m_1 and m_2 have equal momentum their kinetic energies E_1 and E_2 are in the ratio	14.44444465637207px;">m₁: m₂ C. m₂: m₁ D. m₁² : m₂²
14	Two bodies with masses M_A and M_B are moving with equal kinetic energy.Their linear moments are numerically in a ratio $\|P_A\| : \|P_B\|$ will be:	A. M_B: M_A B. M_A: M_B C. √M_A : √M_B D. M_A²: M_B²
15	Energy is stored in the choke coil in the form of	A. Heat B. Magnetic energy C. Electric energy D. Electro -magnetic energy
16	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
17	The terminal velocity of a small size spherical body of radius R moving in a fluid varies as	A. R B. R² C. 1/R D. (1/R)²
18	A capacitor acts as an infinite resistance for	A. AC B. DC C. Both AC and DC
19	A moving charge will gain energy due to the application of	A. Electric field B. Magnetic C. Both of these D. None of these
20	The unit of inductance is equivalent to	A. V x s/A B. V x A/s C. A x s/v D. V/A x s