

Physics General Science Test Hard Mode

| Sr | Questions | Answers Choice |
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| 1 | 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 |
| 2 | A particle moving in a magnetic field has increase in its velocity then its radius of the circle | A. Decreases B. Increases C. Remains the same D. Becomes half |
| 3 | The contrast in the fringes in any interference pattern depends on | A. Fringe width B. Intensity ratio of the sources C. Distance between the slits D. Wavelength |
| 4 | A person standing on a rotating platform has his hands lowered He suddenly outstretches his arms.The angular momentum | A. Becomes zero B. Increases C. Decreases D. Remains the same |
| 5 | 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 |
| 6 | The mass defect for the nucleus of helium is 0.0303 a.m.u What is the binding energy per nucleon for helium in MeV? | A. 28 B. 7 C. 4 D. 1 |
| 7 | A couple produces | A. Purely linear motion B. Purely rotational motion C. Linear and rotational motion D. No motion |
| 8 | In a simple harmonic motion the kinetic energy (KE) and the potential energy (PE), are such that throughout the motion | A. KE remains constant B. PE remains constant C. KE/PE is constant D. KE + PE remains constant |
| 9 | Which of the following sources give discrete emission spectrum? | A. Incandescent electric bulb B. Sun C. Mercury vapour lamp D. Candle |
| 10 | Which of the following is the only vector quantity | A. Temperature B. Energy C. Power D. Momentum |
| 11 | Who explained the origin of the Fraunhofer lines? | A. Fraunhofer B. Kirchhoff C. Fresnel D. Snell |
| 12 | The nuclear model of atom was proposed by | A. J.J Thomson B. E.Rutherford C. Neil Bohr D. Summerfield |
| 13 | Blood has a density | A. Equal to water B. Greater than water C. Lesser than water D. None of these |
| 14 | Which quantity is increased in step-down transformer? | A. Current B. Voltage C. Power D. Frequency |

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| 15 | In which region of electromagnetic spectrum does the Lyman series of hydrogen atom lie | A. Ultraviolet B. Infra red C. Visible D. X-ray |
| 16 | A conducting wire is drawn to double its length Final resistivity of the material will be | A. Double of the original one B. Half of the original one C. One-fourth of the original one D. Same as original one |
| 17 | A pendulum clock set to give correct time in Karachi is taken to Quetta it would give correct time if | A. The mass of the pendulum is increased B. The mass of the pendulum is decreased C. The length of the pendulum os increased D. The length of the pendulum is decreased |
| 18 | A body moves a distance of 10 m along a straight line under the action of a force of 5 Newtons, if the work done is 25 joules the angle which the force takes with the direction of motion of the body is: | A. 0° B. 30° C. 60° D. 90° |
| 19 | The de broglie wave corresponding to a particle of mass m and velocity v has a wavelength associated with it | A. h/mv B. $hm\ v$ C. mh/v D. m/hv |
| 20 | 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 |