

Physics ECAT Pre Engineering Chapter 19 Dawn of Modern Physics Physics Online Test

| Sr | Questions | Answers Choice |
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| 1 | The special theory of relatively treats the problems involving: | A. Inertial frames of reference B. Non-inertial frames C. Non-accelerated frame D. Both (A) and (C) E. Both (B) and (C) |
| 2 | Strictly speaking, the earth is: | A. An accelerated frame of reference B. A non-inertial frame of reference C. An inertial frame of reference D. A non-accelerated frame of reference E. Both (A) and (B) |
| 3 | The concept of direction is purely: | A. Absolute B. Relative C. Relative to stars always D. Relative to the sun always E. None of these |
| 4 | Current, voltage, resistance measuring circuit is connected with the galvanometer with the help of switch, known as | A. ON switch B. off switch C. function switch D. none of these |
| 5 | The energy of the 4th orbit in hydrogen atom is | A. 2.5 ev B. - 3.5 ev C. -0.85 ev D. -13.6 ev |
| 6 | Position and momentum of a particle cannot both be measured simultaneously with perfect accuracy. This is the statement of | A. photoelectric effect B. pair production C. Compton effect D. uncertainty principle |
| 7 | de-Broglies hypthesis was experimentally verified by | A. Maxwell B. Compton C. Einstein D. Davison and Germer |
| 8 | G.P. Thomson observer experimentally that electrons and neutrons possess | A. particle-like properties B. wave-like properties C. neither particle nor wave like properties D. none of these |
| 9 | Davision and Germer performed experiment to verify | A. de-Brogile hypothesis B. theory of relativity C. Newton's law of gravitation D. Mass-energy relation |
| 10 | Wave nature of particle was proposed by | A. Einstein B. Plank C. De-Brogile D. Max well |
| 11 | Momentum is a parameter associated with | A. wave motion B. particle motion C. neither wave nor particle motion D. none of these |
| 12 | With the help of 50 K v electron microscope, a resolution of | A. 0.5 to 1 m to possible B. 1 m to 10 m is possible C. 0.5 to 1 nm is possible D. 1 to 10 nm is possible |
| 13 | Which of the following phenomenon proves the particle nature of light | A. interference B. diffraction C. photoelectric effect D. none of these |
| 14 | An electron is accelerated through a potential difference of 50v. its de-Brogile wavelength is | A. 1.66×10^{-29} m B. 1.74×10^{-10} cm C. 17.4×10^{-6} m D. 1.74×10^{-10} m |

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A particle of mass 5.0 mg moves with a speed of 8.0 m/s. Its de-Broglie wavelength is

- A. 1.66 m
- B. 1.66×10^{-10} m
- C. 1.66×10^{-29} cm
- D. 1.66×10^{-29} m