

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

Sr	Questions	Answers Choice
1	Victor de-Broglie received the Nobel prize in physics in	A. 1925 B. 1929 C. 1932 D. 1935
2	0.1 kg mass will be equivalent to the energy	A. 9×10^{15} J B. 5×10^8 J C. 6×10^{16} J D. 9×10^{16} J
3	The stopping voltage for a certain metal is 100 volts, then the work function for the cathode plate is	A. 100 J B. 1.6×10^{-17} J C. 100 eV D. 1.6×10^{-17} eV
4	According to the de-Broglie relation, an object of large mass and ordinary speed has	A. very small wavelength B. very large wavelength C. very small frequency D. all of these
5	Photocell is a device which converts	A. chemical energy into electrical energy B. electrical energy into light energy C. heat energy into electrical energy D. light energy into electrical energy
6	In process of annihilation of matter, the two photons produced move in opposite direction to converse	A. momentum B. charge C. energy D. mass
7	Pair production is the phenomenon in which	A. matter is converted into energy B. energy is converted into matter C. light is converted into electrical energy D. electrical energy is converted into light
8	Position was discovered by Carl Anderson in	A. 1920 B. 1925 C. 1928 D. 1932
9	The existence of positron was predicted by Dirac in	A. 1920 B. 1925 C. 1930 D. 1928
10	When a positron comes close to an electron they annihilate into photons such that	A. each photon has energy 0.51 MeV B. each photon has energy 1.02 MeV C. each photon has energy 0.25 MeV D. none of these
11	When a positron comes close to an electron they annihilate into	A. one photon B. two photons which travel in the same direction C. two photons which travel in the opposite direction D. two photons which travel in any direction
12	Converse of pair production is known as	A. Compton effect B. annihilation of matter C. photoelectric effect D. none of these
13	In order to produce pair production, a photon must have a energy	A. 0.511 MeV B. 0.256 MeV C. 1.02 MeV D. 0.956 MeV

14	If the radius of first orbit of hydrogen atom is 0.53 \AA the radius of second orbit will be	<p>B. 0.212 \AA</p> <p>C. 21.2 \AA</p> <p>D. 0.14 \AA</p>
15	When a high energy photon interact with a metal, which of the following effect is most likely to be taken place	<p>A. pair production</p> <p>B. photoelectric effect</p> <p>C. Compton effect</p> <p>D. None of these</p>