

Physics ICS Part 2 Chapter 19 Online MCQ's Test

Sr	Questions	Answers Choice
1	Compton effect proves.	A. Wave nature of radiation B. Wave nature of particle C. Dual nature of particle D. Particle nature of radiations
2	The photon with energy greater than 1.02 MeV can interact with matter as.	A. Photoelectric effect B. Compton effect C. Pair production D. annihilation of matter
3	The Compton effect is associated with	A. X-rays B. γ -rays C. Positive rays D. β -rays
4	The unit for Plank's constant is:	A. $J \cdot s^{-1}$ B. $J \cdot m$ C. $J \cdot m$ D. $J \cdot m^2 \cdot s^{-2}$
5	A perfect absorber must also be perfect	A. Cavity B. Sources of radiation C. Radiator D. None of these
6	A positron is an anti particle of.	A. Proton B. Electron C. Neutron D. Photon
7	The energy of the photon of wavelength 500 nm is.	A. 3.10 eV B. 2.49 eV C. 1.77 eV D. 1.52 eV
8	The value of Stefan is constant is:	A. $4.57 \times 10^{-8} \text{ J} \cdot \text{m}^{-2} \cdot \text{K}^{-4} \cdot \text{W} \cdot \text{m}^{-2}$ B. $5.67 \times 10^{-8} \text{ W} \cdot \text{m}^{-2} \cdot \text{K}^{-4}$ C. $6.67 \times 10^{-11} \text{ W} \cdot \text{m}^{-2} \cdot \text{K}^{-4}$ D. $7.45 \times 10^{-9} \text{ W} \cdot \text{m}^{-2} \cdot \text{K}^{-3}$
9	In Compton effect the photon behaves as a.	A. Wave B. Particle C. Nucleon D. Both a and b
10	Pair production cannot take place in vacuum because :	A. Mass is not conserved B. Momentum is not conserved C. Energy is not conserved D. Charge is not conserved
11	Compton shift is maximum for scattering angle of photon	A. 0° B. 90° C. 180° D. 45°
12	The emission of electrons from metal surface when exposed to light is called:	A. Compton effect B. Pair production C. Photoelectric effect D. None of above
13	unit of Plank's constant is same as that of.	A. Acceleration B. Angular momentum C. Linear momentum D. Entropy
14	The minimum frequency needed to emit an electron from metal surface is called:	A. Work function B. Threshold frequency C. Quanta frequency D. All of above

15 Platinum wire becomes yellow at a temperature of.
A. 900°C
B. 1300°C
C. 1600°C
D. 500°C

16 Application of wave like nature of particle is
A. Photodiode
B. Optical microscope
C. Electron microscope
D. Compound microscope

17 Albert Einstein got noble prize in:
A. 1926
B. 1921
C. 1918
D. 1931

18 The numerical value of Compton wavelength is equal to
A. $3.43 \times 10^{-12}\text{ m}$
B. $1.43 \times 10^{-12}\text{ m}$
C. $2.43 \times 10^{-12}\text{ m}$
D. $0.43 \times 10^{-12}\text{ m}$

19 In an nihilation emitted photons moves in opposite directions to conserve.
A. Mass
B. Charge
C. Energy
D. Momentum

20 The stopping potential for a certain metal is 10 volts. Thus work function for the cathode is.
A. 10 J
B. $1.6 \times 10^{-18}\text{ J}$
C. $1.6 \times 10^{-19}\text{ J}$
D. $1.6 \times 10^{-30}\text{ J}$