

ECAT Physics Chapter 19 Dawn of Modern Physics

Sr	Questions	Answers Choice
1	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
2	Photoelectric effect takes place with a photon of:	A. Very high energy B. Very low energy C. Low energy D. High energy E. None of these
3	When a platinum wire is heated, it appears orange red at	A. 500 °C B. 900 °C C. 1100 °C D. 1300 °C
4	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)
5	Momentum is a parameter associated with	A. wave motion B. particle motion C. neither wave nor particle motion D. none of these
6	Electromagnetic -radiation means:	A. Photons B. protons C. Electrons D. Mesons E. None of these
7	Max plank received the Nobel Prize in physics for his discovery of energy quanta in	A. 1900 B. 1906 C. 1912 D. 1918
8	If you are moving at relativistic speed between two points that are a fixed distance apart, then the distance between the two points appers	A. larger B. shorter C. equal D. none of these
9	Absolute motion cannot be detected	A. in its own frame of references B. in a different frame of references C. both in its frame and different frame of references D. none of these
10	The value of threshold frequency for different metals is	A. different B. same C. may be different or may be same D. none of these
11	Compton was awarded Nobel prize in physics in	A. 1921 B. 1923 C. 1925 D. 1927
12	There is no way to detect:	A. Absolute uniform motion B. Accelerated motion C. State rest D. State of motion E. None of these
		A. less than one B. ...

13	Practically the quantity v/c is always:	B. Equal to one C. Greater than one D. all of these E. None of these
14	Albert Einstein got the Nobel prize in physics for his explanation of photoelectric effect in	A. 1916 B. 1919 C. 1921 D. 1923
15	With the help of 50 K v electron microscope, a resolution of	A. 0.5 to 1 m is possible B. 1 m to 10 m is possible C. 0.5 to 1 nm is possible D. 1 to 10 nm is possible
16	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)
17	Wave nature of particle was proposed by	A. Einstein B. Plank C. De-Broglie D. Max well
18	According to Einstein, with the great increase in the speed of the body the relativistic length of the body	A. Remains constant B. Decreases C. Increases D. Reduces to zero
19	The ratio of energy E to the corresponding frequency (f) of the radiation (emitted or absorbed) is called:	A. Wien's constant B. Stefan's constant C. Planck's constant D. Boltzmann's constant E. None of these
20	The mass of an object will be doubled at speed	A. $1.6 \times 10^8 \text{ ms}^{-1}$ B. $2.6 \times 10^8 \text{ ms}^{-1}$ C. $2.6 \times 10^7 \text{ ms}^{-1}$ D. $2.6 \times 10^9 \text{ ms}^{-1}$