

Physics ECAT Pre Engineering Chapter 21 Nuclear Physics

Sr	Questions	Answers Choice
1	Radioactivity was discovered by:	A. Becquerel B. Marie curie C. Pierre curie D. All of them E. None of these
2	Electrons are	A. positive charged B. negatively charged C. massless D. neutral
3	γ -rays are	A. electrostatic waves B. electromagnetic waves C. heavy particles D. longitudinal waves
4	Gamma rays consist of steam of	A. electron B. proton C. photons D. all of these
5	A mass spectrograph sort out	A. molecules B. atoms C. elements D. isotopes
6	Mass of proton is of order of	A. 10^{-31} gm B. 10^{-27}kg C. 10^{-24} gm D. 10^{+27} kg
7	Mass of proton is	A. 1.67×10^{-27}kg B. 1.67×10^{-31} kg C. 1.66×10^{-34} kg D. 1.67×10^{-17} kg
8	When thorium nucleus emits a β -particle, the daughter nucleus is called:	A. Protactinium B. Actinium C. Uranium D. Radium E. Redon
9	U-238 present in the natural uranium is about:	A. 59% B. 0.007% C. 99% D. 39% E. 19%
10	Alfa , beta and gamma rays are emitted from a radio-active substance	A. spontaneously B. when it is heated C. when it is exposed to light D. When it interacts with the other particle
11	Neutron was discovered by	A. Curie B. Roentgen C. Chadwick D. Rutherford
12	The half life of radioactive substances depends upon	A. amount of substance B. energy of substance C. state of substance D. temperature of substance
13	A pair of quark and antiquark makes a:	A. Meson B. Baryon C. Proton D. Neutron E. None of these
14	For an atom having atomic number Z and atomic weight A, the charge on the nucleus is	A. A - Z B. A + Z C. Z D. A

15 Marie curie and Pierre curie discovered:

A. Uranium
B. Polonium
C. Radium
D. Both (A) and (C)
E. Plutonium

16 Curie is a unit of

A. reluctance
B. resistivity
C. binding energy
D. radioactivity

17 For Protium, the mass defect is:

A. Infinite
B. Zero
C. Very large
D. A few grams
E. None of these

18 If 'V' is the relativistic speed and 'C' is the speed of light then according to Einstien the factor V/C must always be

A. Equal to 1
B. Less than 1
C. Greater than 1
D. Infinity

19 Neutron was suggested to be in the nucleus by:

A. Rutherford in 1920
B. Bohar in 1913
C. Dirac in 1928
D. Anderson in 1932
E. None of these

20 In his experiment on nuclear reactions, Rutherford bombarded α particles on:

A. Nitrogen
B. Hydrogen
C. Lead
D. Oxygen
E. Krypton
