

ECAT Pre General Science Physics Chapter 21 Nuclear Physics

Sr	Questions	Answers Choice
1	Referring to the above figure, we can say that of all the elements, the most stable element is	A. Phosphours B. Iron C. uranium D. Lithium E. Bismuth
2	Hydrogen atom with only one proton in its nucleus, and one electron in its orbit is called	A. deuteron B. deterium C. protium D. tritium
3	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
4	Maric Curie and Pieree Curie discovered two new radioactive elements, which are called	A. polonium uranium B. uranium and radium C. polonium and radium D. none of these
5	For an atom having atomic number 'Z' and atomic weight 'A', the number of neutrons in the nucleous is	A. A - Z B. A C. Z D. A + Z
6	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
7	The energy is found from Einstein's mass energy relation is called	A. binding energy of electron B. binding energy of proton C. binding energy of neutron D. binding energy of nucleus
8	Mass of neutron is	A. 1.67×10^{-31} kg B. 1.67×10^{-27} kg C. 9.1×10^{-31} kg D. 1.67×10^{-19} kg
9	1 amu is equal to.	A. 1.66×10^{-24} kg B. 1.66×10^{-19} kg C. 1.66×10^{-24} kg D. 1.66×10^{-27} kg
10	How many isotopes of helium are present?	A. 1 B. 2 C. 3 D. 4
11	According to Rutherford atomic model, the positive charge in an atom	A. is concentrated at its centre B. is in the form of positive electron C. is spread uniformly through its volume D. none of these
12	The most abundant isotope of neon is	A. neon-20 B. neon-21 C. neon-22 D. neon-23
13	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
14	The amount of energy equivalent to 1 a.m.u is	A. 9.315 Mev B. 93.15 Mev C. 931.5 Mev D. 2.22 Mev

15	After alpha decay the atomic number of the atom	A. increase by four B. decreases by two C. increases by two D. decrease by four
16	In his experiment on nuclear reactions, Rutherford bombarded α particles on:	A. Nitrogen B. Hydrogen C. Lead D. Oxygen E. Krypton
17	The number of protons inside a nucleus is called	A. mass number B. atomic weight C. atomic number D. none of these
18	The nucleus left after the emission of some radiation is called:	A. Parent nucleus B. Daughter nucleus C. Mother nucleus D. Any of these E. None of these
19	Radiation detector are used to	A. measure intensity of radiation B. measure energy of radiation C. difference between different types of radiation D. all the above
20	How much time, the α -particle more massive than an electron	A. 600 B. 7000 C. 5000 D. 15000