

Physics ECAT Pre Engineering Chapter 21 Nuclear Physics

Sr	Questions	Answers Choice
1	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
2	Radioactivity was discovered by	A. Rutherford B. Henri Becquereal C. Maxwell D. James Chadwick
3	The isotope/s of hydrogen is /are:	A. Protium B. Deuterium C. Tritium D. Both (A) and (B) E. All of these
4	Neutron was discovered by	A. Curie B. Roentgen C. Chadwick D. Rutherford
5	Heavy water is made of one oxygen atom and two atoms of:	A. Protium B. Deuterium C. Tritium D. Any of these E. None of these
6	Nucleon means:	A. Only electrons B. Only neutrons C. Only protons D. Both (A) and (C) E. Both (B) and (C)
7	Radioactivity was discovered by:	A. Becquerel B. Marie curie C. Pierre curie D. All of them E. None of these
8	When a nucleus emits an alpha particles, its charge number decreases by	A. 3 B. 2 C. 6 D. 5
9	In radioactive decay, the new element which is formed due to the disintegration of original element is called	A. element B. daughter element C. parent element D. none of these
10	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
11	Three quarks make:	A. An electron B. A meson C. A baryon D. A photon E. None of these
12	The unit of decay constant is:	A. Second B. Metre C. Hour D. Year E. Second ⁻¹
13	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
14	The nuclei of an element having the same charge number but different mass numbers are	A. Isobars B. Isotopes

14 called:	C. Isomers D. Isobaric E. Isothermal
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	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
17	Which are not the elementary particles?	A. Photons B. Leptons C. Hadrons D. Quarks E. None of these
18	The time required for a radioactive material to decrease in active by one half is called	A. half time B. half life C. disintegration time D. mean life
19	Beta particles are	A. hydrogen nuclei B. helium nuclei C. electrons D. photons
20	Phenomenon of radioactivity is due to disintegration of	A. nucleus B. neutron C. proton D. molecule