Physics ECAT Pre Engineering Chapter 21 Nuclear Physics

Sr	Questions	Answers Choice
1	When thorium nucleus emits aβ-particle, the daughter nucleus is called:	A. Protactinium B. Actinium C. Uranium D. Radium E. Redon
2	Alfa particles are	A. hydrogen nuclei B. helium nuclei C. electrons D. photons
3	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
4	Radium was discovered by:	A. Becquerel B. Marie curie C. Pierre curie D. Rutherford E. Both (B) and (C)
5	Beta particles are	A. hydrogen nuclei B. helium nuclei C. electrons D. photons
6	γ-rays behave like a particle because they explain the	A. Compton effect B. Photoelectric effect C. Pair-production D. all the above
7	The missing mass which is converted to energy in the formation of nucleus, is called	A. packing fraction B. mass defect C. binding energy D. none of these
8	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
9	Proton was discovered by Rutherford in	A. 1915 B. 1906 C. 1910 D. 1920
10	The number of protons inside a nucleus is called	A. mass number B. atomic weight C. atomic number D. none of these
11	Marie curie and Pierre curie discovered:	A. Uranium B. Polonium C. Radium D. Both (A) and (C) E. Plutonium
12	1 amu is equal to	A. 1.66 x 10⁻²⁴kg B. 1.66 x 10⁻¹⁹kg C. 1.66 x 10⁻³⁴kg D. 1.66 x 10⁻²⁷kg
13	A particle having the mass of electron and charge of a proton is called a	A. photon B. position C. antiproton D. antineutrino
14	When a nucleus emits an alpha particle, it atomic mass decreased by	A. 2 B. 1 C. 4 D. 3
		A. 600

15	How much time, theα-particle more massive than an electron	B. 7000 C. 5000 D. 15000
16	γ-rays are	A. electrostatic waves B. electromagnetic waves C. heavy particles D. longitudinal waves
17	Neutrons are	A. positive charge B. negatively charged C. massless D. neutral
18	β-particles are easily deflected by collisions than heavy	A. α-particles B. β-particles C. γ-particles D. none of these
19	If a nucleus emits an alpha particle, its mass number decreases by 4 while charge number decreased by	A. -4 B. 4 C. 2 D. 1
20	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