ECAT Pre General Science Physics Chapter 21 Nuclear Physics

Sr	Questions	Answers Choice
1	Gamma rays consist of steam of	A. electron B. proton C. photons D. all of these
2	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
3	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
4	Three quarks make:	A. An electron B. A meson C. A baryon D. A photon E. None of these
5	Pair production take place when energy ofγ-rays photon is	A. equal to 1.02 Mev- B. greater than 1.02 Mev C. less than 1.02 Mev D. none of these
6	Different radioactive material have	A. same half lives B. different half lives C. same mean lives D. same total lives
7	There is present in paraffin a large amount of:	A. Nitrogen B. Hydrogen C. Carbon D. Baryllium E. Lithium
8	The chemical behaviour of an atom is determined by	A. binding energy B. atomic number C. mass number D. number of isotopes
9	A mass difference of 0.0012 u is equivalent to and energy of:	A. 0.5 Me V B. 1.13 MeV C. 5.13 MeV D. 1.13 keV E. 1.13 eV
10	During the nuclear changes, the law/s of conservation that hold/s are that of:	A. Charge B. energy C. Momentum D. Mass E. All of these
11	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
12	γ-rays are	A. electrostatic waves B. electromagnetic waves C. heavy particles D. longitudinal waves
13	When a charged particle passes through matter, it produces ionization, this effect is used in	A. fission reaction B. reactor C. radiation detector D. fusion reaction
14	In his experiment on nuclear reactions, Rutherford bombardedα particles on:	A. Nitrogen B. Hydrogen C. Lead D. Oxygen

		E. Krypton
15	The chemical properties of an element depends upon the number of	A. electron B. position C. photons D. neutrons
16	Mass of proton is of order of	A. 10⁻³¹gm B. 10⁻²⁷kg C. 10⁻²⁴gm D. 10⁺²⁷kg
17	Alfa particles are	A. hydrogen nuclei B. helium nuclei C. electrons D. photons
18	1 amu is equal to.	A. 1.66 x 10⁻²⁴kg B. 1.66 x 10⁻¹⁹kg C. 1.66 x 10⁻²⁴kg D. 1.66 x 10⁻²⁷kg
19	Hydrogen atom with only one proton and one neutron in its nucleus, and one electron, is called	A. deuterium B. protium C. tritium D. none of these
20	When a nucleus emits an alpha particle, it atomic mass decreased by	A. 2 B. 1 C. 4 D. 3