ECAT Pre General Science Physics Chapter 21 Nuclear Physics

Sr	Questions	Answers Choice
1	The isotope/s of hydrogen is /are:	A. Protium B. Deuterium C. Tritium D. Both (A) and (B) E. All of these
2	There is present in paraffin a large amount of:	A. Nitrogen B. Hydrogen C. Carbon D. Baryllium E. Lithium
3	The nuclei of an element having the same charge number but different mass numbers are called:	A. Isobars B. Isotopes C. Isomers D. Isobaric E. Isothermal
4	The chemical behaviour of an atom is determined by	A. binding energy B. atomic number C. mass number D. number of isotopes
5	The mass of the nucleus is always less than the total man of the protons and neutron that make up the nucleus. The difference of the two masses is called	A. nuclear fission B. nuclear fusion C. man defect D. radioactivity
6	The chemical properties of all the isotopes of an elements are	A. same B. different C. slightly different D. none of these
7	Which are not the elementary particles?	A. Photons B. Leptons C. Hadrons D. Quarks E. None of these
8	The number of protons inside a nucleus is called	A. mass number B. atomic weight C. atomic number D. none of these
9	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
10	The half lie of radium-226 is	A. 238 years B. 4.5 x 10⁹days C. 1620 years D. 332 years
11	In 1932 Chadwick discovered	A. proton B. neutron C. photon D. electron
12	Examples of moderators used in a fission reactor is/are:	A. Water B. Heavy water C. Carbon D. Hydrocarbon E. All of these
13	For an atom having atomic number Z and atomic weight A, the number of electron in an atoms	A. A - Z B. A + Z C. Z D. A
14	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
15	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
16	When thorium nucleus emits aβ-particle, the daughter nucleus is called:	A. Protactinium B. Actinium C. Uranium D. Radium E. Redon
17	Nuclei that have the same charge number but different mass number are called	A. isotones B. isomers C. isotopes D. isobars
18	When a nucleus emits an alpha particle, it atomic mass decreased by	A. 2 B. 1 C. 4 D. 3
19	In radio-active decay, the original element which disintegrate to another element is called	A. element B. daughter element C. parent element D. none of these
20	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