

Physics ECAT Pre Engineering Chapter 21 Nuclear Physics

Sr	Questions	Answers Choice
1	The number of isotopes of hydrogen are	A. 2 B. 1 C. 3 D. 4
2	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
3	Rate of decay is actually described by.	A. Half line B. Decay constant C. Mean life D. Total life E. None of these
4	The chemical properties of an element depends upon the number of	A. electron B. position C. photons D. neutrons
5	Proton was discovered by Rutherford in	A. 1915 B. 1906 C. 1910 D. 1920
6	Nucleus of a hydrogen atom may contain:	A. One neutron only B. Two protons and one neutron C. Two protons and two neutrons D. Aany of above E. One proton only
7	Neutron was disvovered by:	A. Rutherford in 1920 B. Chadwick in 1922 C. Bohr in 1913 D. Compton in 1927 E. None of these
8	Which of the following material has smaller has life	A. uranium B. polonium C. radium D. radian
9	Charge on proton is	A. 1.59 x 10 ⁻⁹ C B. 1.59 x 10 ⁻⁷ C C1.59 x 10 ⁻¹⁹ C D. 1.59 x 10 ⁻¹⁹ C
10	A mass spectrograph sort out	A. molecules B. atoms C. elements D. isotopes
11	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
12	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
13	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
14	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

15	Curie is a unit of	A. reluctance B. resistivity C. binding energy D. radioactivity
16	For Protium, the mass defect is:	A. Infinite B. Zero C. Very large D. A few grams E. None of these
17	The half life of radioactive substances depends upon	A. amount of substance B. energy of substance C. state of substance D. temperature of substance
18	Neutron was discovered in	A. 1915 B. 1920 C. 1925 D. 1932
19	Electrons are	A. positive charged B. negatively charged C. massless D. neutral
20	Referring to the above figure, the binding energy per nucleon increases upto mass number equal to:	A. 50 B. 100 C. 150 D. 200 E. 250