

## Physics ECAT Pre Engineering Chapter 21 Nuclear Physics Physics Online Test

Sr	Questions	Answers Choice
1	When radioactive nucleus emits $\alpha$ -particle, the proton-neutron ratio	A. decrease B. increase C. same D. none of these
2	Phenomenon of radioactivity is due to disintegration of	A. nucleus B. neutron C. proton D. molecule
3	A curie represents a very strong source of	A. $\alpha$ -particle B. $\beta$ -particle C. $\gamma$ -particle D. none of these
4	The rate of decay of radioactive substance	A. is constant B. decrease exponentially with time C. varies inversely as time D. decreases linearly with time
5	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
6	An alpha particle has a charge of	A. +2e B. -2e C. -e D. +3e
7	When a nucleus emits an alpha particles, its charge number decreases by	A. 3 B. 2 C. 6 D. 5
8	When a nucleus emits an alpha particle, it atomic mass decreased by	A. 2 B. 1 C. 4 D. 3
9	Radioactivity is	A. self disruptive activity B. spontaneous activity C. exhibited by all elements under proper conditions D. both 'a' and 'b'
10	Curie is a unit of	A. reluctance B. resistivity C. binding energy D. radioactivity
11	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
12	Gamma rays consist of steam of	A. electron B. proton C. photons D. all of these
13	Alfa particles are	A. hydrogen nuclei B. helium nuclei C. electrons D. photons
14	Beta particles are	A. hydrogen nuclei B. helium nuclei C. electrons D. photons

C. electrons  
D. photons

15 Maric Curie and Pierree Curie discovered two new radioactive elements, which are called

A. polonium uranium  
B. uranium and radium  
C. polonium and radium  
D. none of these