

ECAT Physics Chapter 21 Nuclear Physics Online Test

Sr	Questions	Answers Choice
1	Three quarks make:	A. An electron B. A meson C. A baryon D. A photon E. None of these
2	A pair of quark and antiquark makes a:	A. Meson B. Baryon C. Proton D. Neutron E. None of these
3	Which are not the elementary particles?	A. Photons B. Leptons C. Hadrons D. Quarks E. None of these
4	U-238 present in the natural uranium is about:	A. 59% B. 0.007% C. 99% D. 39% E. 19%
5	Heavy water is made of one oxygen atom and two atoms of:	A. Protium B. Deuterium C. Tritium D. Any of these E. None of these
6	Examples of moderators used in a fission reactor is/are:	A. Water B. Heavy water C. Carbon D. Hydrocarbon E. All of these
7	There is present in paraffin a large amount of:	A. Nitrogen B. Hydrogen C. Carbon D. Beryllium E. Lithium
8	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
9	In his experiment on nuclear reactions, Rutherford bombarded particles on:	A. Nitrogen B. Hydrogen C. Lead D. Oxygen E. Krypton
10	Rutherford performed an experiment on nuclear reactions in:	A. 1718 A.D B. 1818 A.D C. 1918 A.D D. 2001 A.D. E. 1701 A.D.
11	The counter, which also provides the power to the G.M. tube is called:	A. Thin mica window B. thin glass window C. Airy window D. Wooden window E. None of these
12	In wilson cloud chamber, the air becomes saturated with:	A. Alcohol vapours B. Water C. Helium gas D. Nitrogen gas E. None of these
13	The unit of decay constant is:	A. Second B. Metre C. Hour D. None of these

D. Year
E. Second⁻¹

14 The reciprocal of decay constant λ of a radioactive material is:

A. Frequency
B. Half life
C. Year
D. Mean life
E. None of these

15 Rate of decay is actually described by.

A. Half line
B. Decay constant
C. Mean life
D. Total life
E. None of these