

PPSC Physics Full Book

Sr	Questions	Answers Choice
1	The half life of a radioactive element depends upon.	A. Temperature B. pressure C. nature of element D. quantity of the element
2	Half life and mean lifetime of a radioactive element are.	A. Equal to each other B. Inversely proportional to each other C. Directly proportional to each other D. Not related to each other
3	Which of the following is not a mode of radioactive decay	A. Nuclear fusion B. Alpha decay C. Electron capture D. Positron emission
4	The reciprocal of decay constant lamda of a radioactive substances is equal to.	A. total life B. Half life C. Mean life D. Curie
5	Radioactive substances do not emit	A. Alpha particles B. Beta particles C. Gama rays D. Neutrons
6	Radioactivity is the phenomenon associated with the.	A. Transition of radiowaves B. production of alpha particles only C. Decay of nucleus D. Reception of radio waves
7	The half life of a radioactive substance is 6 years What is the time taken by 12 g of this substance to decay completely.	A. 12 years B. 24 years C. 48 years D. infinity
8	Which is the famous standard model of the universe.	A. the big bang B. Casmos C. Astronaut D. The small stap
9	Which particles have spin quantum number 1/2	A. Mesons B. Laptions C. Hadrons D. Muons
10	The unit generally used for measuring astronomical distances is.	A. Parsecs B. Light year C. Metre D. Kilometer
11	How many types of quarks were suggested i 1964 quark theory.	A. Two B. Three C. Four D. Five
12	There are how many types of forces or interactions.	A. Two B. Three C. Four D. Five
13	Which six particles and their antiparticles interact by the weak interaction.	A. Leptons B. Hadrons C. Muons D. pi mesons
14	In a Geiger Marsden experiment why do the great majority of the Alpha particles pass straight through the metal foil.	A. Atomic nuclei may contain neutrons B. Atoms are electrically neutral C. Atoms are largely empty space D. Atoms have positively charged nuclei
	In the Geiger Marsden experiment a narrow beam of alpha particles was fired at a thin piece	A. A very small charged nucleus

15	of Gold foil in a vacuum Some of the particles were scattered though large angles The result of the experiment provided evidence for the existence of.	B. electrons orbiting the nucleus C. Neutrons in the nucleus D. Nuclear reaction
16	Which particle interact via all fundamental forces.	A. Leptons B. Hadrons C. Muons D. mesons
17	Which of the following are particle accelerators.	A. Cyclotrons B. Synchrotrons C. Linear accelerators D. All of the above
18	The best shield against Gama rays would be of	A. Heavy water B. Aluminium C. Iron D. Lead
19	The working of cloud chamber is based in the presence of.	A. Super heated vapours B. Liquid C. Super saturated vapors D. Unsaturated vapours
20	The path of Gama rays in Wilson cloud chamber is	A. Irregular B. Dense and straight C. Thin and continuous D. Thin and discontinuous
21	What are isotopes.	A. Atoms of the same element with different numbers of neutrons. B. Atoms of the same element with different numbers of protons. C. Atoms which are radioactive D. Atoms which have gained or lost an electron
22	The neutral atoms of all isotopes of the same element contain the same numbers of.	A. Electrons and protons B. Electrons and neutrons C. Neutrons D. Neutrons and protons
23	The back ground radiation in the atmosphere on the average is	A. 0.5 Sv per year B. 1.0 Sv per year C. 1.5 Sv per year D. 2.0 Sv per year
24	In a cloud chamber the Alpha particles leave	A. Dense, straight and continuous tracks B. Only straight and continuous tracks C. Thin and discontinuous tracks D. Irregular tracks
25	Which particle has zero charge and zero rest mass.	A. Neutron B. Proton C. Electron D. Photon
26	In which reaction two or more small light nuclei nuclei come together or fuse to form a large nucleus.	A. Radioactivity B. Radioactivity dating C. Nuclear fusion D. Nuclear fission
27	In a Nuclear reactor which material is often used as modeerator.	A. Water B. Graphite C. Uranium D. Water and graphite
28	In which of the following controlled nuclear chain reaction is used to liberate energy.	A. Nuclear bomb B. Atomic bomb C. Hydrogen bomb D. Nuclear reactor
29	Induced fission result from the absorption of	A. electron B. Proton C. Nucleon D. Neutron
30	Ashes from a campfire deep in a cave show carbon -14 activity of only one eighth the activity of fresh wood. How long ago was that campfire made.	A. 13590 years B. 15190 years C. 17190 years D. 21190 years