PPSC Physics Full Book

Sr	Questions	Answers Choice
1	The gama rays have	A. Thin tracks B. Thick tracks C. No definite tracks D. Continuous tracks
2	The Beta particles move along.	A. Straight path B. Curved path C. Zig Zag path D. Circular path
3	Binding energy per nucleon is.	A. Greatest for heavy nuclei B. Least for heavy nuclei C. Greatest for light nuclei D. Greatest for medium weight nuclei
4	When a beta particle travels though a medium it knocks out electrons from the atoms due to.	A. Gravitational force of attraction B. Electrostatic force of repulsion C. Nuclear force D. Electromagnetic induction
5	48 days after the receipt the amount of iodine -131 left behind is only.	A. 0.1325 g B. 0.2135 g C. 0.3125 g D. 0.1235 g
6	A newly prepared radioactive nuclide has a decay constant Lamda of 10-6 s-1 What is the approximate half life of the nuclide.	A. 1 hour B. 1 day C. 1 week D. 1 month
7	The half life of a given radioactive isotope is 10 years The original mass of the isotope is 12 g What mass of this isotope remains un decayed after 20 years.	A. 0.5 g B. 1.2 g C. 3.0 g D. 6.0 g
8	The half life of isotopes X is four days and its initial mass is 32 mg What mass of the isotope X will remain after twelve days.	A. 2 mg B. 4 mg C. 8 mg D. 18 mg
9	The reciprocal of decay constant lamda of a radioactive element is.	A. Half life B. Mean life C. Total life D. Curie
10	Phenomenon of radioactivity is due to disintegration of.	A. Proton B. Neutron C. electron D. nucleus
11	Which of the following phenomenon is explained by the tunnel efffect.	A. Alpha decay B. Beta decay C. Gama decay D. Radioactivity
12	The SI unit of radioactivity is.	A. Becquerl B. Curie C. Joule D. rutherford
13	The two elements with same number of electrons but different mass number are called.	A. Isotones B. Isobars C. Isotopes D. Isomers
14	The half life of a radioactive substance as compared to its mean lif eis.	A. 30% B. 50% C. 70% D. 90%
15	Which one of the following has maximum frequency.	A. Visible light B. Gama rays C. Ultraviolet rays D. Infrared rays

16	Which of the following is deflected by an electric field.	A. Alpha particles B. X rays C. Gama rays D. Neutrons
17	Which one of the following is a neutron absorber	A. Pb B. Cd C. Cu D. Ag
18	Critical mass is the minimum mass needed for	A. Fusion B. H-Bomb C. Chain reaction D. Binding energy
19	Which of the following is required for maintaining sustained chain reaction.	A. Neutrons B. Protons C. Electrons D. Photons
20	Which one of the following quantities is conserved in a nuclear reactor.	A. Energy only B. Mass only C. Momentum only D. Mass energy and momentum
21	The most suitable material for moderator in a nuclear reactor is.	A. B B. Cd C. D2O D. Uranium
22	Besides U^{235} what else is needed for making as atomic bomb.	A. Electons B. Protons C. Neutrons D. Photons
23	Which uranium isotope having the atomic weights as given below is easily fissionable.	A. 234 B. 235 C. 236 D. 238
24	The chemical behavior of an atom is determined by	A. Mass number B. Number of Isotopes C. Atomic number D. Binding energy
25	The charge on a helium nucleus is equal to the charge of.	A. Two electrons B. Two protons C. Two neutrons D. One proton
26	The nucleus of tritium is called.	A. Proton B. Triton C. Deuleron D. Positron
27	The half life of radium -226 is	A. 1620 years B. 45 x 10⁹ years C. 3.8 days D. 23.5 minutes
28	A spectroscope sorts out	A. Atoms B. Molecules C. Elements D. Isotopes
29	The half life of uranium -238 is	A. 1620 years B. 4.5 x 10⁹years C. 3-8 days D. 23.5 minutes
30	The SI unit of decay constant is.	A. m B. m-1 C. s-1 D. N m-1