PPSC Physics Full Book

Sr	Questions	Answers Choice
1	The emission of Beta particle from protonium -218 results in the formation of.	A. Protactinium -231 B. Thorium -232 C. Astatine -218 D. Radon -222
2	The energy of neutrons obtained during a fission reaction is.	A. 0.1 MeV B. 1 KeV C. 1 MeV D. Zero
3	The critical mass of a fissionable material is.	A. 1 kg B. 10 kg C. 100 kg D. 1.,000 kg
4	The necessary condition for nuclear fusion is.	A. High temperature and high pressure. B. Low temperature and high pressure C. Low temperature and low pressure D. High temperature and low pressure.
5	Atomic reactor is based on	A. Controlled chain reaction B. Uncontrolledly chain reaction C. Nuclear fission D. Nuclear fusion
6	Hydrogen bomb is based on	A. Controlled chain reaction B. Uncontrolled chain reaction C. Nuclear fusion D. Nuclear fission
7	When Be is bombarded by alpha particles, then we obtain	A. electron B. Proton C. Positron D. Neutron
8	In the fusion process, there are	A. Hydrogen isotopes B. Helium Isotopes C. Carbon isotopes D. Oxygen isotopes
9	A gama ray of energy 1900 MeV is absorbed by	A. Proton antiproton pair B. Electron positron pair C. Producing heat in the substance D. The orbit
10	Which temperature is required for the fusion of two nuclides.	A. 10⁶ K B. 10⁷K C. 10⁸K D. 10 ⁹ K
11	Which of the following are electromagnetic waves.	A. Alpha particles B. Beta particles C. Gama rays D. Water waves
12	Magnetic field does not cause deflection in	A. Alpha particle B. Beta minus particles C. Beta plus particles D. Gama rays
13	The mass of an alpha particle is.	A. 2 u B. 4 u C. 6 u D. 8 u
14	Marie Curie and Pierre Curie discovered two new radioactive elements which are.	A. Uranium and radkum B. Platinum and radium C. Polonium and radium D. Crypton and radon
	A freshly made sample of radioactive material gives a count rate of 8,000 counts per minute	A. 5 days

15	A freshly made sample of radioactive material gives a count rate of 8,000 counts per minute After twenty days it gives a count rate of 500 counts per minute What is the half life of the materials.	B. 10 days C. 40 days D. 20 days
16	Cs - 137 is a radioisotope used ot determine the thickness of the walls of steel pipes Cs 137 is chosen because it emits	A. Radiowaves B. Alpha particles C. Beta particles D. gama particles
17	A factory buy 100 g of a radioactive chemical with a half life of 5 years which decays to a stable compound How much of the chemical will still be radioactive 10 years time.	A. 25 g B. 50 g C. 75 g D. 100 g
18	The bunding energy per nucleon for iron is.	A. zero B. Maximum C. Negative D. Minimum
19	The most abundant isotope of neon is.	A. Neon -20 B. Neon -21 C. Neon -22 D. Both a and c
20	A device used to determine mass of an isotope quite accurately is known as.	A. Spectrometer B. Mass spectrometer C. Mass detector D. Electronic balance
21	Both xenon and cesium each have	A. 24 isotopes B. 28 isotopes C. 32 isotopes D. 36 isotopes
22	In heavy elements of the periodic table the number of neutrons than protons are.	A. Lesser B. Greater C. Equal D. Undetermined
23	Among different elements of the periodic table which of the following atoms is the simplest.	A. Carbon B. Oxygen C. Hydrogen D. Nitrogen
24	The mass of proton is equal to.	A. 1.673 x 10⁻²⁷ kg B. 1.673 x 10²⁷ kg C. 9.1 x 10-31 kg D. 9.1 x 10³¹ kg
25	As the mass number increases, the binding energy per nucleon in a nucleus	A. Increases B. Decreases C. Remain constant D. Varies in a way that depends upon A
26	As the mass number varies, which of the quantities does not change w.r.t nucleus.	A. Mass B. Volume C. Binding energy D. Density
27	The hyperfine lines in the spectrum relates to	A. Stark effect B. Zeeman effect C. Lande's spliting D. Nuclear magnetic spin
28	Mean life of a radioactive sample is 100 s its half life will be	A. 0.693 s B. 1 s C. 6.93 s D. 69.3 s
29	Which both elements are good for nuclear fission.	A. Thorium an uranium B. Thorium and radium C. Plutonium and uranium D. Plutonium and throrium
30	From which radiation it is most difficult to protect oneslelf.	A. Alpha radiation B. Beta radiation C. Gama radiation D. Heat radiation