PPSC Physics Full Book

Sr	Questions	Answers Choice
1	Half life of a radioactive elements 10 minutes If the initial cont. rate is 368 counts per minute for what time count rate reaches 32 counts per minute.	A. 20 minutes B. 40 minutes C. 80 minutes D. 120 minutes
2	Cobalt -60 is a radioactive element with half life of 5.25 years. What fraction of the original sample will be left after 26 years.	A. 1/4 B. 1/8 C. 1/16 D. 1/32
3	The decay process in which an unstable nucleus splits into two fragments of comparable mass is known as.	A. Nuclear fission B. nuclear fusion C. Radioactivity D. Carbon dating
4	Which of the following has the highest relative biological effectiveness or the quality factor.	A. X rays and Gama rays B. Electrons C. Photons D. Alpha particles
5	The energy delivered to the tissue per unit mass is called the absorbed dose of.	A. X rays B. gama rays C. Radiation D. energy
6	What is the quantitative description of the effect of radiation on the living tissue.	A. Radiation dosimetry B. Radioactive dating C. Telemetry D. Dosage
7	The most familiar example of radioactive dating is.	A. Nitrogen dating B. Carbon dating C. Hydrogen dating D. Helium dating
8	The constant lamda is called the.	A. Decay constant B. Gas constant C. Planck's constant D. Dose constant
9	One rem is equal to.	A. 0.1 Sv B. 0.01 Sv C. 0.001 Sv D. 0.0001 SV
10	The SI unit of equivalent dose is	A. Seivert B. Gray C. Radian D. Rem
11	One radian is equal to.	A. 0.1 Gy B. 0.01 Gy C. 0.001 Gy D. 0.0001 gy
12	One gray is equal to.	A. 1 J-1 kg -1 B. 1 J -1 kg -2 C. 1 J 1 -g-1 D. 1 j kg -2
13	The SI unit of absorbed dose in.	A. Bel B. Weber C. Rem D. Grey
14	One becquerel is equal to	A. Decay of orie radioactive atoms per second B. Decay of 10 radioactive atoms per secnd C. Decay of 100 radioactive atoms per second D. Decay of infinity radioactive atoms per second.

15	the alpha particle does not travel for enough in air.	A. Due to its intense ionization B. Due to its large mass C. Due to its high charge D. Due to its Hight Ionization
16	Radioactive decay series can be represents on	A. Smith chart B. Segre chart C. Logarithmic chart D. Carbon paper
17	Beta decay may occur by	A. Beta minus B. Beta Plus C. Electron capture D. All of these
18	The decay to form other nuclides by emitting particles and electromagnetic radiations by unstable nuclides is called.	A. Nuclear stability B. Radioactivity C. Carbon dating D. Spontaneously
19	The force that bonds protons and neutrons together int he nucleus despite the electrical repulsion of the protons is called.	A. Molecular force B. Nuclear force C. Atomic force D. Gravitational force
20	The binding energy to pull the deuterium H apart into a proton and a neutron is equal to.	A. 1.22 MeV B. 2.22 MeV C. 3.22 Mev D. 4.22 MeV
21	The energy that must be added to separate the nucleus is called.	A. Critical energy B. Binding energy C. Gravitational energy D. Electrostatic energy
22	How much large is the proton mass than the electron mass.	A. 1536 B. 1636 C. 1736 D. 1836
23	The relationship between mass number atomic number and neutron number is.	A. A = Z + N B. A = Z - N C. Z = A + N D. N = Z - A
24	The total number nucleons in a nucleus are called.	A. Mass number B. Atomic number C. Neutron number D. Isotopes
25	Which of the following radiations can penetrate 20 cm thick steel.	A. Alpha particles B. Beta particles C. Gama particles D. Neutrons
26	Which particle are not emitted by a radioactive substance.	A. Alpha particles B. Beta particles C. Gama particles D. Neutrons
27	Which Isotopes is use din radioactive dating.	A. C¹² B. C¹³ C. C¹⁴ D. C¹⁶
28	The capture of neutron by a proton results in the formation of.	A. Deuteron and gama rays B. Deuteron and alpha particle C. Triton and Beta particles D. Tritron and X rays
29	The chain reaction is controlled by a series of rods usually made of.	A. uranium B. Cadimium C. Boron D. Steel
30	The binding energy per nucleon for uranium is about.	A. 7.7 MeV B. 9.6 MeV C. 13.6 MeV D. 21.6 MeV