

## Physics ICS Part 2 Online MCQ's Test

Sr	Questions	Answers Choice
1	Bottom quark carries charge :	A. $\frac{2}{3} e$ B. $-\frac{2}{3} e$ C. $+\frac{1}{3} e$ D. $-\frac{1}{3} e$
2	Which of the following basic force is able to provide an attraction between two neutrons:	A. Electrostatic and nuclear b B. Electrostatic and gravitational C. Gravitational and strong nuclear D. Only nuclear force
3	Unit of decay constant $\lambda$ is:	A. ms B. $m^{-1}$ C. m D. $S^{-1}$
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5	Gamma radiations are emitted due to:	A. De-excitation of atom B. De-excitation of nucleus C. Excitation of atom D. Excitation of nucleus
6	A radio active substance has a half life of four months. 3 -fourth of the substance will decay in:	A. 6 months B. 8 months C. 12 months D. 16 months
7	The radio active nuclide ${}_{86}\text{Ra}^{228}$ decays by a series of emissions of three alpha particles and one beta particle. The nuclide X finally formed is:	A. ${}_{64}\text{X}^{220}$ B. ${}_{86}\text{X}^{222}$ C. ${}_{84}\text{X}^{216}$ D. ${}_{88}\text{X}^{215}$
8	The energy equivalent of 1 kg of matter is about:	A. $10^{15}$ J B. 1 J C. $10^{12}$ J D. $10^{17}$ J
9	Mass equivalent of 931 MeV energy is:	A. $6.02 \times 10^{-23}$ kg B. $1.766 \times 10^{-27}$ kg C. $2.67 \times 10^{-29}$ kg D. $6.02 \times 10^{-87}$ kg
10	How many neutrons are there in the nuclide $\text{Zn}^{66}$ ?	A. 22 B. 30 C. 36 D. 66
11	The binding energy for nucleus A is 7.7 MeV and that for nucleus B is 7.8 MeV. Which nucleus has the larger mass?	A. Nucleus A B. Nucleus B C. Less than nucleus D. None of these
12	Laser is a device which can produce:	A. Intense beam of light B. Coherent beam of light C. Monochromatic beam of light D. All of the above
13	Target material used in x-rays tube have following properties.	A. High atomic number and high melting point B. High atomic number and low melting point C. Low atomic number and low melting point D. High atomic number only
14	Frequency of x-rays depends upon.	A. Number of electrons striking target B. Accelerating potential C. Nature of the target D. Both B and C
		A. K.E increases , P.E decreases B. K.E decreases , P.E increases

15	When an electron in an atom goes from a lower to higher orbit its:	B. K.E increases , P.E increases C. K.E decreases , P.E increases D. K.E decreases , P.E decreases
16	In the Bohr's model of the hydrogen atom, the lowest orbit corresponds to:	A. Infinite energy B. Maximum energy C. Minimum energy D. Zero energy
17	In according with Bohr's theory the K.E of the electron is equal to:	A. $\frac{ke^2}{2r}$ B. $\frac{Ze^2}{r}$ C. $\frac{Ze^2}{r^2}$ D. $\frac{Ze^2}{2r^2}$