

## Physics FSC Part 2 Chapter 20 Online MCQ's Test

Sr	Questions	Answers Choice
1	The first laser was built by	A. ArthursSchawalow B. T.H.Maiman C. Peter Sorokin D. C.H.Townes
2	For an atom of hydrogen atom the radius of the first orbit is given by:	A. $\frac{h^2}{4\pi^2 m_e e^2}$ B. $\frac{h^2}{4\pi^2 m_e e^2}$ C. $\frac{h^2}{4\pi^2 m_e e^2}$ D. $\frac{h^2}{4\pi^2 m_e e^2}$
3	The following gas was identified in the sun using spectroscopy	A. Hydrogen B. Helium C. Carbon D. Nitrogen
4	In Helium Neon laser, the discharge tube is filled with	A. 80% He, 20% Neon B. 85% He, 15% Neon C. 83% He, 17% Neon D. 90% He, 10% Neon
5	1 rem =	A. 0.001 SV B. 0.01 SV C. 0.1 SV D. 1.01 SV
6	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
7	Balmer Empirical formula explains the electromagnetic radiation of any excited atom in terms of their.	A. Energy B. Mass C. Wave length D. Momentum
8	Laser can be made by creating.	A. Meta stable B. Population inversion C. Excited state D. All of these
9	The series in infrared region is:	A. Paschen series B. Bracket series C. Pfund series D. All of above
10	If the ionization energy of hydrogen atom is 13.6 eV, its ionization potential will be	A. 136.0 volt B. 3.0 volt C. 13.6 volt D. None of these
11	Which of the following is one of the spectral series of atomic hydrogen?	A. Brockett series B. Balmer series C. P fund series D. All of above
12	The radius of hydrogen atom is:	A. $0.53 \text{ \AA}$ B. $0.053 \text{ \AA}$ C. $0.53 \times 10^{-9} \text{ m}$ D. $0.053 \times 10^{-9} \text{ m}$
13	For Holography we use	A. X ray B. Laser C. gama rays D. Beta rays
14	In Helium Neon laser, discharge tube is filled with Neon gas.	A. 10% B. 15% C. 85% D. 90%
		A. Paschen series

15	The first spectral lines were discovered in 1885, were	<p>B. Balmer series</p> <p>C. Pfund series</p> <p>D. Bracket series</p>
16	Laser is a beam of light which is	<p>A. Monochromatic</p> <p>B. Coherent</p> <p>C. Unidirectional</p> <p>D. All of these</p>
17	The Balmer series is obtained when all the transition of electrons terminate on	<p>A. 1<sup>st</sup> orbit</p> <p>B. 2<sup>nd</sup> orbit</p> <p>C. 3<sup>rd</sup> orbit</p> <p>D. 4<sup>th</sup> orbit</p>
18	The velocity of electron moving in 1 <sup>st</sup> orbit of hydrogen atom is:	<p>A. <math>2.09 \times 10^6 \text{ ms}^{-1}</math></p> <p>B. <math>2.18 \times 10^6 \text{ ms}^{-1}</math></p> <p>C. <math>2.19 \times 10^6 \text{ ms}^{-1}</math></p> <p>D. <math>3.18 \times 10^6 \text{ ms}^{-1}</math></p>
19	Helium Neon Laser Beam emitted from discharge tube has a colour.	<p>A. Blue</p> <p>B. Green</p> <p>C. Red</p> <p>D. Black</p>
20	Balmer series lies in	<p>A. Visible region</p> <p>B. Invisible region</p> <p>C. Ultraviolet region</p> <p>D. Infrared region</p>