Physics ECAT Pre Engineering Chapter 20 Atomic Spectra

Sr	Questions	Answers Choice
1	The results of spectra obtained by Blamer were expressed in 1896 by	A. Bohr B. Rydberg C. Planck D. Rutherford E. Coulomb
2	The lasing or active medium in He-Ne laser discharge tube is:	A. Nitrogen B. Helium C. Hydrogen D. Neon E. None of these
3	A metastable stae:	A. Is an excited state B. Is that in which excited electron is stable C. Is that in which excited electron is usually unstable D. Means a time interval of 10⁻⁸second E. Both (A) and (C)
4	Static electricity is produced by the transfer of:	A. Electrons B. Protons C. One fluid D. Two fluid E. None of these
5	Photons must have energy equal to	A. ev B. En C. hf D. None of these
6	Energy required by an electron revolving in certain orbit to jump to an excited state is called:	A. Ionization energy B. Ionization potential C. Excitation energy D. Excitation potential E. None of these
7	An compared to solid matter, a crack or an air bubble allows:	A. Great amount of X-rays to pass B. Smallast amount of X-rays to pass C. Very samall amount of X-rays to pass D. Any of these E. None of these
8	The minimum wavelength of X-rays produced of 1KV potential difference is applied across the anode and cathode of the tube is	A. 1.24 x 10⁻¹⁰m B. 7.92 x 10⁻²⁰m C. 2.78 x 10⁻¹⁴m D. 3.88 x 10⁻¹¹m
9	In flesh, light element like carbon, hydrogen and oxygen predominate. Three elements allows _____ amount of incident X-ray to pass through them	A. Small B. Greater C. Equal D. Sometimes
10	Balmer series was identified in:	A. 1685 B. 1785 C. 1885 D. 1985 E. 1585
11	X-rays produced in a tube operating at 10^5V. The speed of X-rays produced is	A. 3 x 10⁸m/s B. 3.1 x 10⁸m/s C. 2.8 x 10⁸m/s D. 1.88 x 10⁸m/s
12	In case of braking radiations, when the rate of deceleration is very large, the emitted radiation corresponds to:	A. Short wavelength B. Large wavelength C. Very large wavelenth D. Low frequency E. Both (B) and (C)
13	Gaussian surface is always:	A. Rectangular B. Spherical C. Cylinder

		D. Box shape E. Any of these
14	The range of wavelengths of colurs in the visible colours is	A. 140 nm to 456 nm B. 10 nm to 56 nm C. 410 nm to 656 nm D. 910 nm to 956 nm E. None of these
15	X-ray are also known as	A. Roentgen rays B. Maxwell rays C. Plank range D. Einstein rays
16	The natural arrangement of colours in the spectrum of white light spectrum is	A. VIBGYOR B. ROYBGIV C. ROYBIGV D. BIGROYV E. None of these
17	An electron of the hydrogen atom in the second orbit is called its:	A. Ground state B. Excited state C. Ionized state D. Any of these E. None of these
18	Laser is a beam of:	A. Visible light B. Infra red light C. Ultra violet light D. Violet light only E. yellow light only
19	X-rays can penetrate in a solid matte through a distance of several:	A. Kilo metres B. Metres C. Centimeters D. A few angstroms E. One micrometer
20	The holes created in the L and M shells are occupied by transitions of:	A. Electrons from lower states B. Electrons from higher state C. Positrons from higher states D. Electrons from K shell E. Both (A) and (B)