## Physics ECAT Pre Engineering Chapter 20 Atomic Spectra

| Sr | Questions | Answers Choice |
|---|---|---|
| 1 | In case of braking radiations, when the rate of deceleration is very large, the emitted radiation corresponds to: | A. Short wavelength<br>B. Large wavelength<br>C. Very large wavelenth<br>D. Low frequency<br>E. Both (B) and (C) |
| 2 | The formula of Brackett series can be obtained by putting in the general formula, the value of n equal to: | A. <div>one</div><br>B. two<br>C. three<br>D. four<br>E. five |
| 3 | X-rays produced in a tube operating at $10^5$V. The speed of X-rays produced is | A. $3 \times 10^8$ m/s<br>B. $3.1 \times 10^8$ m/s<br>C. $2.8 \times 10^8$ m/s<br>D. $1.88 \times 10^8$ m/s |
| 4 | Static electricity is produced by the transfer of: | A. Electrons<br>B. Protons<br>C. One fluid<br>D. Two fluid<br>E. None of these |
| 5 | The electric field lines start from: | A. Positive charge<br>B. Negative charge<br>C. Either A and B<br>D. Neutron<br>E. An atom |
| 6 | An electron of the hydrogen atom in the second orbit is called its: | A. Ground state<br>B. Excited state<br>C. Ionized state<br>D. Any of these<br>E. None of these |
| 7 | Selenium is: | A. An insulator<br>B. A conductor<br>C. Both A and B<br>D. Excellent conductor<br>E. None of these |
| 8 | The photocopying process is called: | A. Geography<br>B. Sonography<br>C. Xerography<br>D. Zerography<br>E. None of these |
| 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<br>B. Greater<br>C. Equal<br>D. Sometimes |
| 10 | Coulomb multiplied by volt by volt gives the unit called: | A. farad<br>B. Ohm<br>C. Second<br>D. joule<br>E. Watt |
| 11 | The range of wavelengths of colurs in the visible colours is | A. 140 nm to 456 nm<br>B. 10 nm to 56 nm<br>C. 410 nm to 656 nm<br>D. 910 nm to 956 nm<br>E. None of these |
| 12 | The inkjet printer eject a thin stream of: | A. Water<br>B. Oil<br>C. Ink<br>D. Any above<br>E. None of these |
| 13 | CT scanning is the abbreviated name of | A. Computed Technology<br>B. Computed Technique<br>C. Computed Technology<br>D. Computerized Technique |

| 14 | Balmer series was identified in: | A. 1685<br>B. 1785<br>C. 1885<br>D. 1985<br>E. 1585 |
|---|---|---|
| 15 | Spectrum represents the number of component colours present in certain light in terms of: | A. Wavelength<br>B. Frequency<br>C. Energy<br>D. Both (A) and (B)<br>E. All of these |
| 16 | The life time of metastable state is equal to | A. Life time of excited state<br>B. Greater than by excited state<br>C. Zero<br>D. Less than by excited state |
| 17 | The first shell near the neucles is | A. L-shell<br>B. X-shell<br>C. N-shell<br>D. M-shell |
| 18 | The spectrum emitted from hydrogen filled discharge tube is: | A. Line spectrum<br>B. Discrete spectrum<br>C. And spectrum<br>D. Absorption spectrum<br>E. Both (A) and (B) |
| 19 | X-rays can penetrate in a solid matte through a distance of several: | A. Kilo metres<br>B. Metres<br>C. Centimeters<br>D. A few angstroms<br>E. One micrometer |
| 20 | The natural arrangement of colours in the spectrum of white light spectrum is | A. VIBGYOR<br>B. ROYBGIV<br>C. ROYBIGV<br>D. BIGROYV<br>E. None of these |