

## Physics ECAT Pre Engineering Chapter 20 Atomic Spectra Physics Online Test

| Sr | Questions  | Answers Choice   |
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| 1  | The formula of Brackett series can be obtained by putting in the general formula, the value of n equal to: | A. <div>one</div> B. two C. three D. four E. five  |
| 2  | Lyman series in the spectrum of hydrogen exists in the :   | A. Infra-red region B. Visible region C. Ultraviolet region D. Both(A) and (B) E. None of these  |
| 3  | Tick the series which lie/s in. the infra-red region.  | A. Pfund series B. Brackett series C. Paschen series D. All of these E. None of these            |
| 4  | Tick the series which lies in the visible region:  | A. Lyman series B. Balmer series C. Paschen series D. Brackett series E. P fund series           |
| 5  | Spectrum represents the number of component colours present in certain light in terms of:                  | A. Wavelength B. Frequency C. Energy D. Both (A) and (B) E. All of these                         |
| 6  | The process of formation of spectrum is called:  | A. Interference B. Spectroscopy C. Dispersion D. Reflection E. Botha (A) and (D)                 |
| 7  | The results of spectra obtained by Balmer were expressed in 1896 by:                                       | A. <div>Bohr</div> B. Rydberg C. Planck D. Rutherford E. Coulomb                                 |
| 8  | 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                                     |
| 9  | Balmer series lies in that region of electromagnetic wave spectrum which is called:                        | A. Visible region B. Invisible region C. Infra-red region D. ultraviolet region E. None of these |
| 10 | Balmer series was identified in:   | A. 1685<br>B. 1785<br>C. 1885<br>D. 1985<br>E. 1585  |
| 11 | The first series which was identified in the spectrum of hydrogen is called:                               | A. Lyman series B. Balmer series C. Paschen series D. Brackett series E. Pfund series            |
| 12 | The results of spectra obtained by Blamer were expressed in 1896 by  | A. Bohr B. Rydberg C. Planck D. Rutherford E. Coulomb  |
| 13 | 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<br>E. None of these   |
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| 14 | Atoms of hydrogen gas can be excited by passing electric current through it when the gas is filled into the discharge tube at a pressure which is           | A. Less than atmospheric pressure B. Much less than atmospheric pressure C. Greater than atmospheric pressure D. Much greater than atmospheric pressure E. Both C and D |
| 15 | Consider a photon of continuous X-ray and a photon of characteristics X-ray of same wavelength. Which of the following is/are different for the two photons | A. Frequency B. Penetrating power C. Energy D. Method of creation   |