

Date Planned : __ / __ / __	Daily Tutorial Sheet - 7	Expected Duration : 90 Min
Actual Date of Attempt : __ / __ / __	Level - 2	Exact Duration : _____

86. For a given principal level $n = 5$, the energy of its subshells is of the order:
(A) $s < d < f < p$ **(B)** $s < p < d < f$ **(C)** $d < f < p < s$ **(D)** $s < p < f < d$
87. The maximum number of electrons in an orbital, is governed by.....principle.
(A) Hund's **(B)** Aufbau **(C)** Pauli's **(D)** None of these
88. Any p orbital can accommodate up to:
(A) Four electrons **(B)** Two electrons with parallel spin
(C) Six electrons **(D)** Two electrons with opposite spin
89. The spectral line obtained when an electron jumps from $n = 6$ to $n = 2$ level in hydrogen atom belongs to the:
(A) Balmer series **(B)** Lyman series **(C)** Paschen series **(D)** Pfund series
90. The ionization potential of hydrogen atom is 13.6 eV. The energy required to remove an electron from the $n = 2$ state of the hydrogen atom is:
(A) 3.4 eV **(B)** 6.8 eV **(C)** 13.6 eV **(D)** 27.2 eV
91. The e/m ratio for electron was determined by.....
(A) Einstein **(B)** Newton **(C)** J J. Thomson **(D)** Planck
92. Na^{\oplus} and Ne areto each other:
(A) Isobar **(B)** Isoelectronic **(C)** Isotone **(D)** Isotope
93. Which of the following angular momentum is not possible for electron in Bohr's orbit?
(A) $0.5 \hbar$ **(B)** \hbar **(C)** $2\hbar$ **(D)** $3\hbar$
94. If the radius of the first Bohr orbit of the H atom is r then for the Li^{2+} ion it will be:
(A) $3r$ **(B)** $9r$ **(C)** $r/3$ **(D)** $r/9$
95. The wavelength of certain line in H-atom spectra is observed to be 4341\AA . ($R_H = 109677\text{cm}^{-1}$). The value of quantum number of higher state is:
(A) 3 **(B)** 4 **(C)** 5 **(D)** Data insufficient