Extended or long form of periodic table

91. The element or elements whose position is anomalous in the periodic table is
(a) Halogens
(b) Fe, Co and Ni
(c) Inert gases
(d) Hydrogen

92. An element M has an atomic mass 19 and atomic number 9. Its ion is represented by
(a) M^+ (b) M^-
(c) M^{2+} (d) M^{2-}

93. The number of elements in the 5th period of the periodic table are
(a) 8 (b) 10
(c) 18 (d) 32

94. The element with atomic number 55 belongs to
(a) *s*-block (b) *p*-block
(c) *d*-block (d) *f*-block

95. Coloured salts are formed by
(a) Alkali metals
(b) Lanthanides
(c) Actinides
(d) Transition metals

96. Which one of the following is an *s* - block element
(a) Aluminium (b) Chromium
(c) Niobium (d) Potassium

97. In the modern periodic table, the place of the element with atomic number 31 is in
(a) *s* - block (b) *d*- block
(c) *p* -block (d) *f* – block

98. Last element of group-IV is found to be
(a) Strong metallic
(b) Weak metallic
(c) Strong non-metallic
(d) Weak non-metallic

99. Elements of *d* group are called
(a) Transition elements
(b) Transuranic elements
(c) Metals
(d) Metalloids

100. Which of the following is a normal element
(a) *Ce* (b) *He*
(c) *Li* (d) *Ar*

101. Which of the following is metalloid
(a) Pb
(b) Zn
(c) As
(d) None of these

102. Under normal condition which of the following electronic configuration is able to form dipositive ion
(a) $[Ar]4s^1$
(b) $[Ne]2s^2 3p^6$
(c) $[Ne]3s^2$
(d) None of these

103. The statement that is true for the long form of the periodic table is
(a) It reflects the sequence of filling the electrons in the order of sub-energy levels *s, p, d* and *f*
(b) It helps to predict the stable valency states of the elements
(c) It reflects trends in physical and chemical properties of the elements
(d) It is based on increasing atomic weight

104. To which block is related an element having electronic configuration $1s^2 2s^2 2p^6 3s^2 3p^6 3d^{10} 4s^1$ in the periodic table
(a) *s* - block (b) *p* - block
(c) *d* - block (d) *f* – block

105. $Ce - 58$ is a member of
(a) *s*-block elements
(b) *p*-block elements
(c) *d*-block elements
(d) *f*-block elements

106. Atomic number of elements represent
(a) Number of protons in the nucleus
(b) Number of neutrons in the nucleus
(c) Number of protons and neutrons in nucleus
(d) The valency of an element

107. As we go from left to right in period two of the periodic table, gram atomic volume of the elements
(a) Will change indefinitely
(b) Increases at a constant rate
(c) First increases then decrease
(d) Decreases

108. The electronic configuration of the element which is just above the element with atomic number 43 in the same periodic group is
(a) $1s^2 2s^2 2p^6 3s^2 3p^6 3d^5 4s^2$
(b) $1s^2 2s^2 2p^6 3s^2 3p^6 3d^{10} 4s^2 4p^5$
(c) $1s^2 2s^2 2p^6 3s^2 3p^6 3d^6 4s^1$
(d) $1s^2 2s^2 2p^6 3s^2 3p^6 3d^{10} 4s^1 4p^6$

109. The elements indicating following atomic numbers belong to same group
(a) 11 and 37
(b) 19 and 15
(c) 39 and 88
(d) None of these

110. Elements in which $4f$ orbitals are progressively filled are called as
(a) Transition elements

(b) Lanthanides
(c) Actinides
(d) Inert gases

111. Hydrogen can be put in halogen group because
(a) It has deuterium and tritium as isotopes
(b) It forms hydrides like chlorides
(c) It contains one electron only
(d) It is light

112. In the main group elements (i) as we proceed down the same group in the periodic table and (ii) as we proceed from left to right in the same period, the atomic radius
(a) (i) Increase continuously; (ii) Decreases continuously
(b) (i) Decreases continuously; (ii) Increases continuously
(c) (i) Increases continuously; (ii) Decreases upto the group IV and then increases upto the end of the period.
(d) (i) Decreases continuously; (ii) Decreases upto the group IV and then increases upto the end of the period.

113. Cause of diagonal relationship is
(a) Similar electronic configuration of the elements
(b) Similar e/r ratio of the elements
(c) Same number of valency electrons in the elements
(d) Same atomic weights of the elements

114. From which of the following the hydration energy of Mg^{2+} is larger
(a) Na^{+} (b) Al^{3+}
(c) Be^{2+} (d) Cr^{3+}

115. Group comprising of all metals is
(a) III*A* (b) IV*A*
(c) VII*A* (d) II*A*

116. Whose name is not associated with the development of Periodic Table
(a) Prout's
(b) Newlands
(c) Rutherford
(d) Loother Meyer

117. Element of atomic number 23 is placed in the periodic table in
(a) *s* - block (b) *p* – block
(c) *d* - block (d) *f* – block

118. In which of the following groups all the three members are of the alkaline earth metals family
(a) Al, Sr, Ti (b) Li, Na, K
(c) Mg, Ba, Ca (d) Rb, Cs, Fr

119. Astatine is a
(a) Halogen

(b) Rare earth element
(c) Alkaline earth metal
(d) None of these

120. The nitride ion in lithium nitride is composed of
(a) $7P + 7e$ (b) $10P + 7e$
(c) $7P + 10e$ (d) $10P + 10e$

121. Which set has the same number of unpaired electrons in their ground state
(a) Cl^-, Fe^{3+}, Cr^{3+}
(b) Na^+, Mg^{2+}, Al
(c) Na, P, Cl
(d) N, P, V

122. Which of the following doesn't decompose on heating
(a) $MgCO_3$ (b) Na_2CO_3
(c) Li_2CO_3 (d) $Ca(HCO_3)_2$

123. Which of the following has smallest bond angle
(a) H_2O (b) NH_3
(c) CH_4 (d) CO_2

124. The metal-having highest melting point is
(a) Chromium (b) Tungston
(c) Diamond (d) Silver

125. The elements with atomic numbers 9, 17, 35, 53, 85 are all
(a) Noble gases (b) Halogens
(c) Heavy metals (d) Light metals

126. The atomic number of an element is derived from
(a) Number of electrons
(b) Number of protons
(c) Number of neutrons
(d) Number of isotopes

127. Beryllium shows diagonal relationship with
(a) *Mg* (b) *Na*
(c) *B* (d) Al

128. Which of the properties remains unchanged on descending a group in the periodic table
(a) Atomic size
(b) Density
(c) Valence electrons
(d) Metallic character

129. Which of the following element does not occur in liquid form
(a) *Hg* (b) *Li*
(c) *Ga* (d) *Br*

130. The cause of periodicity of properties is
(a) Increasing atomic radius
(b) Increasing atomic weights
(c) Number of electrons in the valency orbit

(d) The re-occurrence of similar outer electronic configuration

131. The chemistry of lithium is very similar to that of magnesium even though they are placed in different groups

(a) Both are found together in nature

(b) Both have nearly the same size

(c) Both have similar electronic configuration

(d) The ratio of their charge to size is nearly the same