

CHEMISTRY

BOOKS - MBD CHEMISTRY (ODIA ENGLISH)

CLASSIFICATION OF ELEMENTS AND PERIODICITY IN PROPERTIES

Question Bank

1. Which of the following has the largest size?

- A. Be
- B. I
- C. $I^{\,-}$
- D. F

Answer:



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2. To which group of the periodic table does the element havig atomic number 19 belong?



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3. Which of the following has the smallest size

?

A. Na^+

B. Mg^2 +

 $\mathsf{C.}\,Al^3 +$

D.

Answer:



4. Name any two elements of Group-4 of the periodic table.



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5. Name any two elements of Group vA of periodic table.



6. Name the element that are included in the nitrogen family.



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7. Name any two elements of IVA of periodic table.



8. Name any two elements of group VIA of periodic table.



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9. Out of the atomic numbers given below suggest which one of the following will be dblock element and name the element. (Atomic number 12, 13, 18 and 28)



10. Which of the following is a 'd' block element?

A. Na

B. Fe

C. Mg

D. C

Answer:



11. Which of the following has largest size?

A. Na

B. Na^+

C. N

D. F

Answer:



12. Between Li and Na which is more electropositive?



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13. Which of the following has the lowest electron affinity?

A. K

B. B

C. C

D. F

Answer:



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14. Name any two elements of Group IIA of the periodic table.



15. Name an element which can belong bith to group IA and group VIIA of the periodic table.



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16. Which of he following is a 'p'-block element in the periodic table ?

A. Na

B. Mg

C. Ni

D. Mn

Answer:



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17. Name the elements of group IA of the periodic table .



18. Which of the following has the lowest atomic volume?

A. Al

B.B

C. F

D.O

Answer:



19. Which is the most electronegative element in the periodic table ?



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20. What happens to the atomic size of the element along a period ?



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21. Which of the following elements has the smallest atomic size ?

- A. C
- B. F
- C. Na
- D. Cl

Answer:



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22. Which of the following elements has the highest electronegativity?

- A. F
- B. He
- C. Na
- D. Ca

Answer:



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23. Which of the following is a 'p-' block element in the periodic table?

A. Na

B.O

C. Mg

D. Fe

Answer:



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24. How atomic radii vary in a group of periodic table ?



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25. How does ionisation energy vary in a group



26. How does the electron affinity of the elements present in a group change?



27. From amongst the following elements choose one p-block element?

- A. K
- B. N
- C. Cr
- D. Ca

Answer:



28. Which of the following is a d-block element
in the periodic table ?
A. K
B. N

C. Cr

D. Ca

Answer:



29. Name an element which can belong bith to group IA and group VIIA of the periodic table.



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30. Name any two element from d-block in long form of periodic table .



31. Which of the following elements has the highest ionisation potential?

- A. Na
- B. Ne
- C. Ca
- D. Mg

Answer:



32. Whiuch of the	following	elements	has	the
lowest electrones	ativity ?			

A. P

B. N

C.O

D. F

Answer:



33. Which of the following has the smallest size?

A.
$$Na^+$$

B.
$$Mg^2$$
 +

$$\mathsf{C.}\,Al^3 +$$

D.

Answer:



34. What is the electronic configuration of the element of atomic number 22. To which group of the periodic table does it belong?



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35. State Mendeleev's periodic law.



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36. Electron affinity of flourine is less than that of chlorine Why?



37. Atomic volume is not the fundamental property of an atom. Explain, in five sentences.



38. Write short note on characterstics of d-block elements.



39. The ionic radii of alkaline earth metals are smaller than those of the nerest alkali metals. Why?



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40. What do you understand by electron affinity? How electron affinity vary in a periodic table?



41. Explain with reason : Alkali metals do not form dipositive ions.



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42. Expalin with reason: Electronegativity values of inert gases are zero.



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43. The electronic configuration of an element in $1s^2,\,2s^2,\,2p^6,\,3s^2,\,3p^6.$ In which group of the

periodic table will it be placed and why? **Watch Video Solution 44.** Why electron affinity of nitrogen is zero. **Watch Video Solution**

45. Name the elements of group IA of the periodic table .



46. Describe in brief the main feature of long form of periodic table. What are s-block elements?



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47. What is the long from periodic table? What are the advantages of this peroidic table?



48. What is periodic law? What advantages the long form of periodic table has got over Mendeleev's periodic table?



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49. How the properties of the elements vary in each group and each period of the periodic table?



50. What is the long from periodic table ? What are the advantages of this peroidic table ?



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51. What are electron affinity and ionisation energy? Expalin, Arrange nitrogen, oxygen and flourine in the ncresing order of their ionisation energies giving reasons.



52. What is long form periodic table? How do the properties of elements vary in groups and periods of the periodic table? Name the elements of zero group.



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53. Describe long form of periodic table . How ionisation energy vary in groups and periods ?



54. The outermost electronic configuration of most electronegative element is :

A.
$$ns^2np^3$$

B.
$$ns^2np^4$$

C.
$$ns^2np^5$$

D.
$$ns^2np^6$$

Answer: C



55. The element colifornium belongs to the family of :

A. actinide series

B. alkaline -earth family

C. lanthanide series

D. alkali metal family

Answer: A



56. Which of the followig structure is associated with the biggest jump between the second and the third ionisation energies?

- A. $1s^2, 2s^2, 2p^6$
- ${\sf B.}\,1s^2,\,2s^2,\,2p^6,\,3s^1$
- C. $1s^2, 2s^2, 2p^6, 3s^2$
- D. $1s^2$, $2s^2$, $2p^1$

Answer: C



57. Which of the follwing represents the correct order of electeon affinities ?

- A. Cl gt Br gt I gt F
- B. Cl gt F lt Br lt I
- C. F gt Cl gt Br gt I
- D. Cl gt F gt Br gt I

Answer: D



58. If the atomic number of an element is 33, it will be placed in Mendeleev's periodic table in the:

- A. first group
- B. third group
- C. fifth group
- D. seventh group

Answer: C



59. Which one of the following ions has the smallest radius ?

A.
$$Cl^-$$

$$B.S^2$$
 —

C.
$$K^+$$

D.
$$Ca^2$$
 +

Answer: D



60. Which of the followig structure is associated with the biggest jump between the second and the third ionisation energies?

A.
$$1s^2, 2s^2, 2p^6, 3s^1$$

$$\mathsf{B}.\,1s^2,\,2s^2,\,2p^6,\,3s^2,\,3p^1$$

$$\mathsf{C.}\,1s^2,\,2s^2,\,2p^6,\,3s^2,\,3p^2$$

D.
$$1s^2, 2s^2, 2p^6, 3s^2$$

Answer: D



61. Which of the following is incorrect with respect to the property indicated?

A. Electronegativity: $F_2 > C l_2 > B r_2$

B. Electron affinity : $Cl_2 > F_2 > Br_2$

C. Oxidation power: $F_2 > C l_2 > B r_2$

D. Bond energy : $F_2 > C l_2 > B r_2$

Answer: D



62. The first ionosation potential will be maximum for :

A. uranium

B. iron

C. hydrogen

D. lithium

Answer: C



63. The correct order of first ionisation potential among following elements , Be, B, C, N and O is :

A. B ItBe It C It O It N

B. B ItBe It C It N It O

C. B ItBe It C It N It O

D. Be ItB It C It O It N

Answer: A



64. General electronic configuration of lanthanide is :

A.
$$(n-2)f^{1-14}, (n-1)s^2p^6d^{0-1}, ns^2$$

B.
$$(n-2)f^{10-14}, (n-1)d^{10-1}, ns^2$$

C.
$$(n-2)f^{0-14}, (n-1)d^{10}, ns^2$$

D.
$$(n-2)d^{0-1}, (n-1)f^{1-14}, ns^2$$

Answer: A



65. Element with atomic number 56 belongs to which block?

A. s

B. p

C. d

D. f

Answer: D



66. The ions $O^{2-}, Na^+, F^-, Mg^{2+}$ and Al^{3+} are isoelectronic,Their ionic radii show

A. a significant decrease from

 $O^{2\,-}\,
ightarrow\,Al^{3\,+}$

B. an increase from $O^{2-}
ightarrow F^-$ and then

C. a decrease from ${\it O}^{2-}$ to ${\it F}^{-}$ and then

decrease from $Na^+ o Al^{3+}$

increase from $Na^{\,+}\,$ to $Al^{3\,+}\,$

D.

Answer: A

67. The atomic number if vanadium (V), chromiun (Cr), manganese (Mn) and iron (Fe) are respectively 23, 24, 25, and 26 Which one of these may be expected pt have the highest second ionization enthalphy?

A. Fe

B. V

C. Cr

D. Mn

Answer: A



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68. Which one of the following groupinga represents a collection of isoelectronic species ?

[At.nos- Cs - 55 , Br - 35]

A. $Ca^{2\,+}$, $Cs^{\,+}$, Br

B. Na^+ , Ca^{2+} , Mg^{2+}

C. $N^{3\,-}$, $F^{\,-}$, $Na^{\,+}$

D. Be, Al^{3+} , Cl^{-}

Answer: C



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69. What is the characteristic valence shell configuration of coinage metals ?

A. ns^2np^6

$$\mathsf{B.}\,(n-1)d^2np^6$$

C.
$$nd^9ns^1$$

D.
$$(n-1)d^{10}ns^1$$

Answer: D



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70. Which is an amphoteric oxide?

A. ZnO

B. CaO

C. BaO

D. SrO

Answer: A



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71. The order of E.A of F, Cl, Br, and I is:

A. F lt Clgt Brgt I

B. F gt Clgt Brgt I

C. F It Cl It Br It I

D. F gt Cl lt Br lt I

Answer: A



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72. Which one of the following sets of ions represents a collection of iso-electronic species?

A. $k^+, Cl^-, Mg^{2+}, Sc^{3+}$

B. $Na^+, Ca^{2+}, Sc^{3+}, F^-$

 $C.K^+, Ca^{2+}, Sc^{3+}, CL^-$

D. $Na^+, Mg^{2+}, Al^{3+}, Cl^-$

Answer: C



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73. Which of the following electronic comfigurations has the lowest ionosation energy?

A. $1s^2 2s^2$ 2p^6`

B. $1s^2 2s^2 2p^3$

C. $1s^2 2s^2 2p^6 3s^1$

D.

Answer: C



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74. Name the elements of group IA of the periodic table.



75. Which two element of the second period of the periodic table have both positive and negative oxidation number ?



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76. Which of the following has the smallest size?

A. Na^+

B. $Mg^{(2+)}$

C. AL^{3+}

D.

Answer: C



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77. Which halogen shows only one oxidation number in its compounds?



78. Whiuch of the following elements has the lowest electronegativity?

- A.P
- B. N
- C.O
- D. F

Answer: A



79. Which of the following elements has the highest ionisation potential ?

A. Na

B. He

C. Ca

D. Mg

Answer: B



80. Arrange the following in order of increasing electronegativity: S, CL, F, Cs



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81. Arrange the following in order of increasing size: Cl, Cl^+ , Cl^-



82. Name any two element from d-block in long form of periodic table .



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83. Which of the following has largest size?

A. Na

B. Na^+

C. N

D. F

Answer: A



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84. Which of the following has the small size?

A.
$$Cl^-$$

B. Cl

 $\mathsf{C.}\,O^{2\,-}$

D.

Answer: C



85. Which of the following is a d-block element in the periodic table ?



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86. Name an element which can belong bith to group IA and group VIIA of the periodic table.



87. How does the electron affinity of the elements present in a group change?



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88. From among the following elements choose one p-block element:

A. Na

B. Be

C. Ca

D. Al

Answer: D



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89. Which of the following is a 'p-' block element in the periodic table?

A. Na

B. O

C. Mg

D. Fe

Answer: B



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90. How do atomic radii vary in a group of periodic table ?



91. How does ionisation energy vary in a group



?

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92. From amongst the following electronic configuration, find out the alkaline earth element.

 $[Ar]4s^2$

 $[Ar]3d^54s^2$

 $[Ar] 3d^{10} 4s^2$

A. [Ar] $4s^2$,

B. [Ar] $3d^{54}s^2$

 ${\rm C.\,[Ar]}3d^{10}4s^2$

D.

Answer: A



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93. What happens to the atomic size of the element along a period ?



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94. Which of the following elements has the smallest atomic size :

A. Cs

B. F

C. Na

D. Cl

Answer: B



95. Which of the following elements has the highest electronegativity?

A. F

B. He

C. Na

D. Ca

Answer: A



96. Which is the most electronegative element in the periodic table ?



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97. How atomic radii vary in a group of periodic table ?



98. Name any two elements of Group IIA of the periodic table.



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99. Which of he following is a 'p'-block element in the periodic table ?

A. Na

B. Mg

C. N

D. Mn

Answer: C



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100. Name any two elements of group IIA of periodic table.



101. Which of the following has the lowest atomic volume ?

- A. Al
- B. B
- C. F
- D.O

Answer: C



102. Which of the following is a 'd' block element? A. Na B. Fe C. Mg D. C

Answer: B



103. Which of the following has the largest size?

A. Na

B. Na^+

C. N

D. F.

Answer: A



104. Write the electronic configuration of second element of group VI-A of the periodic table.



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105. Between lithium and sodium which is more electropositive?



106. Which of the following has the lowest electron affinity?

A. K

B.B

C. C

D. F

Answer: A



107. Name two elements of Group VA of periodic table.



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108. Out of the atomic numbers given below suggest which one of the following will be a d-group element and name the element.

A. 12

B. 13

C. 18

Answer: D



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109. Name the element present in group IIA of thethird period of the periodic table.



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110. Which of the following has largest size?

A. Na

B. Na^+

C. Cl

D. Cl^-

Answer: D



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111. Name any two elements of IVA of periodic table.



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112. Name any two elements of IVA of periodic table.



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113. Which of the following has the smallest size?

A. Na^+

B. Mg^{2+}

C. Al^{3+}

D.

Answer: C



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114. How does electronegativity vary in a group and period ?



115. What is oxidation number?



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116. How many atoms of fluorine are there in

 $1.9 imes 10^{-6}$ gms of fluroine ? (F = 19 amu)



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117. Why Mg^{2+} ion is smaller than O^{2-} althrough both have the same electronic

configuration? **Watch Video Solution** 118. Why ionosation energy of magnesium is greater than aluminium? **Watch Video Solution 119.** Why electron affinity of Be is zero? **Watch Video Solution**

120. What are sigma and pi-bond's? What is the bond angle and shape of the methane molecule?



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121. Why electron affinity of nitrogen is zero.



122. What is the sum of the oxidation number of all the atoms in a neutral molecule?



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123. Explain with reason : Alkali metals do not form dipositive ions.



124. Expalin with reason: Electronegativity values of inert gases are zero.



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125. Justify the position of carbon and lead in the periodic table on the basis of electronic configuration.



126. The electronic configuration of an element in $1s^2,\,2s^2,\,2p^6,\,3s^2,\,3p^6.$ In which group of the periodic table will it be placed and why?



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127. Explain on the basis of electronic configuration why fluorine and chlorine are put in VIIA of the periodic table.



128. The electronic configuration of an element in $1s^2,\,2s^2,\,2p^6,\,3s^2,\,3p^6.$ In which group of the periodic table will it be placed and why?



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129. Among the four halogens name one which has:

highest value of electron affinity?



130. What is oxidation number?



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131. Explain why the ionisation energy of nitrogen is more than that of oxygen.



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132. The atomic numbers of N,Be and Mg are 7, 4 and 12 respectively. Explain why the electron affinites of hese elements are almost zero.



133. Electron affinities of halogens are high why?



134. Why is electron affinity of Si^{14} is greater than of p^{15} ?



A. F

B. Cl

C. I

D. Br

Answer: A



136. Characteristic of transition element is that

its Is in complete:

- A. d' orbital
- B. p' orbital
- C. f' orbital
- D. s' orbital

Answer: A



137. The order of decrese in atomic radii for Be,

Na, and Mg:

A. Na gt Mg gt Be

B. Mg gt Na gt Be

C. Be gt Na gt Mg

D. Be gt Mg gt Na

Answer: A



138. Which one has lowest first ionozation potential?

A.B

B. C

C. N

D.O

Answer: A



139. Lithium shows diagonal relationship with:

- A. Mg
- B. Hg
- C. Mg and Hg
- D. None of these

Answer: A



140. Which shows highest magnetic moments

?

A.
$$V^{3\,+}$$

B.
$$Cr^{3+}$$

C.
$$Fe^{3+}$$

D.
$$C0^{3+}$$

Answer: C



141. Which transition metal ion is diamagnetic

?

A.
$$Co^{2+}$$

B.
$$Ni^{2\,+}$$

C.
$$Cu^{2+}$$

D.
$$Zn(2+)$$

Answer: D



142. Which has the smallest size?

A. Na^+

B. $Mg^{2\,+}$

C. Al^{3+}

D. $Si^{4\,+}$

Answer: D



143. The ionization of hydrogen atom would give rise to :

A. Hydride ion

B. Hydronium ion

C. Proton

D. hydroxyl ion

Answer: C



144. Which ion has the lower magnetic moment?

A.
$$Cu^{2+}$$

B.
$$Ni^{2\,+}$$

C.
$$Co^{3+}$$

D.
$$Fe^{2+}$$

Answer: A



145. Which elements has the greatest tendancy to lose electrons?

- A.F
- B. Fr
- C. S
- D. Be

Answer: B



146. Which element has the highest electronegativity?

A. F

B. H

C. Ne

D. La

Answer: A



147. The element whose electronic configuration is $1s^2, 2s^2, 2p^6, 3s^2$

- A. Metakkoid
- B. Metal
- C. Nobal gas
- D. Non-metal

Answer: B



148. Which has the smallest size? A. Rb B. K C. Na D. Li **Answer: D** Watch Video Solution

149. Which one is most metallic?

- A.P
- B. As
- C. Sb
- D. Bi

Answer: D



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150. According to modern periodic law, the chemical properties of elements are the periodic functions of there:

- A. Density
- B. Atomic number
- C. Mass number
- D. Atomic mass

Answer: B



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151. According to Mendeleev's periodic law the properties of elements were the periodic function of :

- A. Atomic weight
- B. Atomic number
- C. Number of electron
- D. None of these

Answer: A



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152. Atomic number of Cr is 24, then $Cr^{3\,+}$ will

be:

- A. Diamagnetic
- B. Paramagnetic
- C. Ferromagnetic
- D. None of these

Answer: B



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153. Which set of elements have nearly the same atomic radii?

A. F, Cl, Br, I

B. Na, K, Rb, Cs

C. Li, Be, B, C

D. Fe, Co, Ni, Cu

Answer: D



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154. Among thr following elements, the most electronegativity is :

- A. Oxygen
- B. Chlorine
- C. Nitrogen
- D. Fluorine

Answer: D



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155. Among the following group of element, the one whose element can have positive as well as negative oxidation states are:

A. H, F, O

B. Na, Mg, Al

C. He, Li, Be

D. H, Cl, Br

Answer: D



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156. The process requiring the adsorption of :

A. $F
ightarrow F^{\,-}$

B.
$$H o H^-$$

C.
$$Cl o Cl^-$$

D.
$$O o O^-$$

Answer: D



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157. Which of the following is Dobereiner traid

A. Cl, Br, I

B. Zn, Cr, Na

C. Ne, Ar, K

D. B, C, Si

Answer: A



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158. In III period, the mst acidic oxide is formed

by:

A. Na

- B. P
- C. Cl
- D. S



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159. The example of metalloid elements in the periodic table is :

A. Na and K

- B. Cu and Al
- C. B and Si
- D. Ca and Mg



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160. Manganese belongs to of periodic table:

A. s' block

- B. p' block
- C. d' block
- D. f' block



- **161.** Which is more electropositive?
 - A. Mg
 - B. Al

C.P

D. S

Answer: A



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162. The elements X,Y,Z and J have the indicated electron configuration starting with the innermost shell. The most metallic element is:

A.
$$X = 2, 8, 3$$

B.
$$Y = 2, 8, 8$$

$$C.Z = 2, 8, 8, 1$$

D.
$$J = 2, 8, 8, 7$$



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163. The correct order of the size of the iodine species is :

A. I gt
$$I^{\,+}\,$$
 gt $I^{\,-}\,$

B.
$$I>I^{->}I^{+}$$

C.
$$I^+>I^{-\,>}I$$

D.
$$I^{->}I > I^{+}$$

Answer: D



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164. An example of a non-stoichiometric compound is :

A.
$$Al_2O_3$$

 $\operatorname{B.} Fe_3O_4$

C. NiO

D. PbO

Answer: B



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165. Which of the following is paramagnetic?

A. O_2^-

B. CN^-

C. CO

D. NO^+

Answer: A



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166. Which arrangement for the three halogens Cl, Br and I is correct in the order of their increasing electron affinity:

A. Cl, Br, I

B. I, Br, Cl

C. Br, Cl, I

D. I, Cl, Br

Answer: B



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167. Almost the following elements the configuration having the highest ionization energy is:

- A. [Ne] $3s^23p^1$
- B. [Ne] $3s^23p^3$
- C. [Ne] $3s^23p^2$
- D. [Ar] $3d^{10}4s^24p^3$

Answer: B



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168. Which series of elements would have nearly the same atomic radii?

A. Fe, Co, Ni

B. Na, K, Rb

C. F, Cl, Br

D. Li, Be, B

Answer: A



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169. Which metal exahibits more than one oxidation state:

- A. Na
- B. Mg
- C. Fe
- D. Al



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170. The element with the highest first ionozation potential is :

- A. Boron
- B. Carbon
- C. Nitrogen
- D. Oxygen



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171. The Halogen which has the highest electron affinity:

- A. Fluorine
- B. Chlorine
- C. Bromine
- D. lodine

Answer: B



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172. The correct order of second ionization potential of C, N, O and F is :

- A. Cgt N gt Ogt F
- B. O gt Ngt F gt C
- C. O gt F gt N gt C
- D. Fgt O gt N gt C



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173. Which one is metalloid?

A. Tin

- B. Germanium
- C. Silicon
- D. Carbon

Answer: B



- **174.** Which of the following is not a metal?
 - A. Gold
 - B. Mercury

- C. Scandium
- D. Selenium

Answer: D



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175. Which transition metal cation has maximum unpaired electrons?

- A. Mn^{2+}
- B. Fe^{2+}

C. Co^{2+}

D. $Ni^{2\,+}$

Answer: A



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176. Which one of the following is the smallest

In size?

A. $N^{3\,+}$

 ${\rm B.}\,O^{2\,+}$

C. $F^{\,-}$

D. Na^+

Answer: D



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177. Which ion is colourless?

A. Cu^+

B. Ni^{2+}

C. Co^{2+}

D. $Si^{2\,+}$

Answer: A



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178. The least stable cation is:

A. Li^+

 $\mathsf{B.}\,K^{\,+}$

C. $Al^{2\,+}$

D. Si^{2+}



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179. The polarity is maximum in:

A. N-F

B. C-F

C. O-F

D. F-F

Answer: B



180. Which of the following has the largest size?

A. Br

B. Fr

C. I

D. $I^{\,-}$

Answer: B



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181. Which of the following halides is not oxidised by Mno_2 ?

A.
$$F^{\,-}$$

B. Cl^-

C. Br^-

D. *I* ⁻

Answer: A



182. Lithium shows diagonal relationship with:

A. Al

B. P

C. Si

D. S

Answer: D



183. The diagonal relationship is not shown by

:

A. Li and Mg

B. Be and Al

C. B and Si

D. N and S

Answer: D



184. Which species has the maximum ionic radius:

A.
$$Na^+$$

B.
$$O^{2-}$$

C.
$$F^{\,-}$$

D.
$$Mg^{2+}$$

Answer: B



185. In which pair, second atom is larger than the first :

A. Br, Cl

B. Na,Mg

C. Sr, Ca

D. N, P

Answer: D



186. An element X occurs in short period having configuration ns^2np^1 . The formula and nature of its oxide is :

- A. XO_3 ,basic
- B. XO_3 , acidic
- C. X_2O_3 , amphoteric
- D. X_2O_3 , basic

Answer: C



187. The smallest atom in the following is:

- A. Fluorine
- B. Chlorine
- C. Iodine
- D. Bromine

Answer: A



188. Electron affinity of noble gases is:

A. Very high

B. Low

C. Almost zero

D. High

Answer: C



189. A neutral atom will have the lowest ionization potential when electronic configuration is:

A.
$$1s^{1}$$

$$\mathsf{B.}\ 1s^22s^22p^6$$

C.
$$1s^2 2s^2 2p^6 3s^1$$

$$\mathsf{D.}\ 1s^22s^22p^2$$

Answer: C



190. The lightest metal in the periodic table is:

A. H

B. Mg

C. Ca

D. Li

Answer: D



191. The group in which all the elemets do not have same number of valency electron is :

- A. Zero
- B. Second
- C. First
- D. Seventh

Answer: A



192. The first largest ionisation potential stands for :

A. Li and Mg

B. K

C. Na

D. Rb

Answer: A



193. O_2^{2-} is isoelectronic with

A. H_2

B. N_2

 $\mathsf{C}.\,F_2$

D. S

Answer: C



194. Which one of these is basic?

A. CO_2

B. SnO_2

 $\mathsf{C}.\,NO_2$

D. SO_2

Answer: B



195. Among the following outermost configurations of transition which shows the highest oxidation state:

- A. $3d^34s^2$
- B. $3d^{5}4s^{1}$
- $\mathsf{C.}\,3d^54s^2$
- D. $3d^64s^2$

Answer: C



196. Electronegtivity of beryllium is approximately equal to that of :

- A. Aluminium
- B. Boron
- C. Magnesium
- D. Sodium

Answer: A



197. Which element exhibits variable oxidation
states ?
Λ ΛΙ

A. AI

B. Si

C. Fe

D. Zn

Answer: C



198. The screening effect of 'd' electrone is :

A. Much less than s-electrons

B. Much more than s-electron

C. Equal to s- electrons

D. Equal to p electrons

Answer: A



199. Maximum group valancy of halogens with respect to oxygen is :

- A. One
- B. Five
- C. Six
- D. Seven

Answer: D



200. The law of octaves is applicable too:

A. B, N, C

B. Be, Mg, Ca

C. Ar, K, Ca

D. Se, Te, As

Answer: C



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201. Which is most reactive chemically?

- A. Mg
- B. Ca
- C. Sr,
- D. Ba

Answer: D



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202. The first ionisation energy is smallest for the atom with electronic configuration :

A.
$$ps^2np^3$$

B.
$$ns^2np^4$$

$$\mathsf{C.}\, ns^2np^5$$

D.
$$ns^2np^6$$

Answer: B



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203. Elements of IA group give flame colour due to :

- A. Low IP
- B. Low M.P
- C. Softness
- D. One electron in outermost shell

Answer: A



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204. The number of elements in each long period is :

- A. 18
- B. 10
- C. 8
- D. 32

Answer: A

