

Topic: Periodicity (Multiple Choice Questions) Online Sheet Vol- 1

- Upto which element, the Law of Octaves was found to be applicable
(a) oxygen (b) calcium (c) cobalt (d) potassium
- According to Mendeleev's periodic law, the elements were arranged in the periodic table in the order of
(a) increasing atomic number (b) decreasing atomic number
(c) increasing atomic masses (d) decreasing atomic masses
- In Mendeleev's periodic table, gaps were left for the elements to be discovered later. Which of the following elements found a place in the periodic table later?
(a) Germanium (b) Chlorine (c) Oxygen (d) Silicon
- Which of the following statement (s) about the modern periodic table are incorrect?
(i) The elements in the modern periodic table are arranged on the basis of their decreasing atomic number.
(ii) The elements in the modern periodic table are arranged on the basis of their increasing atomic masses.
(iii) Isotopes are placed in adjoining group(s) in the periodic table.
(iv) The elements in the modern periodic table are arranged on the basis of their increasing atomic number.
(a) (i) only (b) (i), (ii) and (iii) (c) (i), (ii) and (iv) (d) (iv) only
- Which of the following statements about the modern periodic table is correct?
(a) It has 18 horizontal rows known as periods.
(b) It has 7 vertical columns known as periods.
(c) It has 18 vertical columns known as groups.
(d) It has 7 horizontal rows known as groups.
- Which of the following elements A, B, C, D and E with atomic number 2,3,7, 10 and 30 respectively belong to the same period ?
(a) A, B, C (b) B, C, D (c) A, D, E (d) B, D, E
- The elements A, B, C, D and E have atomic number 9,11,17,12 and 13 respectively. Which pair of elements belong to the same group?
(a) A and B (b) B and D (c) A and C (d) D and E
- Where would you locate the elements with electronic configuration 2, 8 in the modern periodic table?
(a) Group 8 (b) Group 2 (c) Group 18 (d) Group 10
- An element which is an essential constituent of all organic compounds belongs to
(a) group 1 (b) group 14 (c) group 15 (d) group 16
- Which of the following is the outermost shell for elements of period 2 ?
(a) K-shell (b) L-shell (c) M-shell (d) N-shell
- Which one of the following elements exhibit maximum number of valence electrons ?
(a) Na (b) Al (c) Si (d) P
- Which of the following gives the correct increasing order of the atomic radii of O, F and N ?
(a) O, F, N (b) N, F, O (c) O, N, F (d) F, O, N
- Which among the following elements has the largest atomic radii ?
(a) Na (b) Mg (c) K (d) Ca
- Which of the following elements would lose an electron easily ?
(a) Mg (b) Na (c) K (d) Ca
- Which of the following elements does not lose an electron easily ?
(a) Na (b) F (c) Mg (d) Al
- Which of the following are the characteristics of isotopes of an element?
(i) Isotopes of an elements have same atomic masses.
(ii) Isotopes of an element have same atomic number.
(iii) Isotopes of an element show same physical properties.
(iv) Isotopes of an element show same chemical properties.
(a) (i), (iii) and (iv) (b) (ii), (iii) and (iv) (c) (ii) and (iii) (d) (ii) and (iv)
- Arrange the following elements in the order of their decreasing metallic character
Na, Si, Cl, Mg, Al
(a) Cl>Si>Al>Mg>Na (b) Na>Mg>Al>Si>Cl (c) Na>Al>Mg>Cl>Si (d) Al>Na>Si >Ca> Mg
- Arrange the following elements in the order of their increasing non-metallic character
Li, O, C, Be, F
(a) F<O<C<Be<Li (b) Li<Be<C<O<F (c) F<C<O<Be<Li (d) F<O<Be<C<Li

19. What type of oxide would Eka-aluminium form?

- (a) EO_3 (b) E_3O_2 (c) E_2O_3 (d) EO

20. Three elements B, Si and Ge are

- (a) metals (b) non-metals
(c) metalloids
(d) metal, non-metal and metalloids respectively

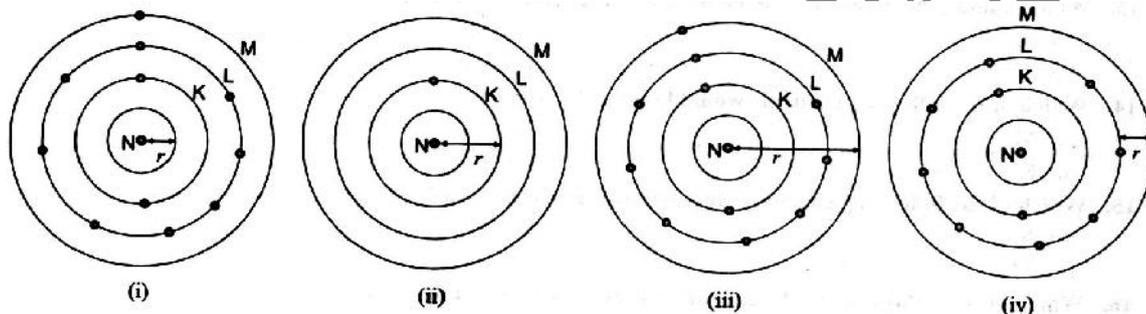
21. Which of the following elements will form an acidic oxide?

- (a) An element with atomic number 7 (b) An element with atomic number 3
(c) An element with atomic number 12 (d) An element with atomic number 19

22. The element with atomic number 14 is hard and forms acidic oxide and a covalent halide. To which of the following categories does the element belong?

- (a) Metal (b) Metalloid (c) Non-metal (d) Left-hand side element

23. Which one of the following depict the correct representation of atomic radius (r) of an atom?



- (a) (i) and (ii) (b) (ii) and (iii) (c) (iii) and (iv) (d) (i) and (iv)

24. Which one of the following does not increase while moving down the group of the periodic table?

- (a) Atomic radius (b) Metallic character (c) Valence (d) Number of shells in an element

24. On moving from left to right in a period in the periodic table, the size of the atom

- (a) increases (b) decreases
(c) does not change appreciably (d) first decreases and then increases

24. Which of the following set of elements is written in order of their increasing metallic character ?

- (a) Be, Mg, Ca (b) Na, Li, K (c) Mg, Al, Si (d) C, O, N
