



Question-13

By considering their position in the periodic table, which one of the following elements would you expect to have maximum metallic characteristic?

Ga, Ge, As, Se, Be

Solution:

Beryllium

Question-14

Which of the following statements is not a correct statement about the trends when going from left to right across the periods of the periodic table?

(i) The elements become less metallic in nature

(ii) The number of valence electrons increases

(iii) The atoms lose their electrons more easily

(iv) The oxides become more acidic

Solution:

(iii) The atoms lose their electrons more easily – Incorrect statement.

Question-15

Element X forms a chloride with the formula  $\text{XCl}_2$ , which is a solid with a high melting point. X would most likely be in the same group of the periodic table as

a. Na b. Mg c. Al d. Si

Solution:

b. Mg

Question-16

Which element has?

a. Two shells, both of which are completely filled with electrons?

b. The electronic configuration of 2,8,2?

c. A total of three shells, with four electrons in its valence shell?

d. A total of two shells, with three electrons in its valence shell?

e. Twice as many electrons in its second shell, as in its first shell?

Solution:

a. Neon (2,8)

b. Magnesium (2,8,2)

c. Silicon (2,8,4)

d. Boron (2,3)

e. Carbon (2,4)

Question-17

What property do all elements in the same column of the periodic table as fluorine have in common?

Solution:

These elements all have 7 electrons in their outermost shells and these often exist as salts, combined with elements from the Alkali metal group.

Question-18

An atom has electronic configuration 2,8,7.

i. What is the atomic number of this element?

ii. To which of the following elements would it be chemically similar

tp N (7) F (9) P (15) Ar (18)

Solution:

- (i) Chlorine - 17
- (ii) F (9)

\*\*\*\*\* END \*\*\*\*\*