

XI Chemistry Worksheet

Time: 30 min Ch#3 : Classification of Elements and Periodicity in Properties -01 Full Marks: 20

Instructions:

1. All questions are compulsory.

2. Please give the explanation for the answer where applicable.

Q1 - What are transition elements?

(2 Marks)

Q2 - Why the electron affinity of chlorine is more than that of fluorine?

(2 Marks)

Q3 - Which will have higher first ionisation energy N or O and why?

(3 Marks)

Q4 - Why the value of second electron affinity is positive whereas first electron affinity is always negative?

(3 Marks)

Q5 - Why the first member of a group differs from other elements of same group? Explain.

(2 Marks)

Q6 - Predict formula of stable binary compound that would be prepared by following the pair of element.

- (i) Al and C
- (ii) Element with at. No. 55 and 35
- (iii) Element with atomic no. 56 and oxygen
- (iv) Element with atomic number 15 and Fluorine
- (v) Pb and element with atomic number 16.

(5 Marks)

Q7 - Arrange O^{2-} , S^{2-} , N^{3-} and F^{-} in increasing order of radii.

(1 Mark)

Q8 - Write four species which are isoelectronic with Ca^{2+} .

(1 Mark)

Q9 - Write the IUPAC name of the following elements with atomic number:

- (i) 103
- (ii) 110

(1 Mark)