# **CHEMISTRY**

# **Metals and Non - Metals**

- Q1 Reaction between (X) and (Y), forms compound Z. X loses electron(s) and (Y) gains electron(s). Which of the following properties is not shown by Z?
  - (A) Has high melting point
  - (B) Has low melting point
  - (C) Conducts electricity in molten state
  - (D) Occurs as solid
- **Q2** The electronic configurations of three elements (X, Y) and (Z) are (X - 2.8; Y - 2.8.7) and (Z - 2.8)2,8,2). Which of the following is correct? (A)(X) is a metal
  - (B) (Y) is a metal
  - (C)(Z) is a non-metal
  - (D) (Y) is a non-metal and (Z) is a metal
- Q3 Which of the following are not ionic compounds? (i) KCl

- (ii) HCl
- (iii) CCl<sub>4</sub>
- (iv) NaCl
- (A) (i) and (ii) (B) (ii) and (iii) (C) (iii) and (iv) (D) (i) and (iii)
- Q4 Which among the following will be the correct chemical formula of two elements X and Y whose atomic numbers are 19 and 17?
  - (A) XY
- (B) XY<sub>2</sub>
- $(C) X_2 Y$
- (D)  $X_2Y_3$
- Q5 What are the ions present in magnesium oxide?
  - (A) Cation: O<sup>-</sup>, Anion: Mg<sup>+</sup>
  - (B) Cation: Mg<sup>+</sup>, Anion: O<sup>-</sup>
  - (C) Cation: Mg<sup>2+</sup>, Anion: O<sup>2-</sup>
  - (D) Cation: O<sup>2-</sup>, Anion: Mg<sup>2+</sup>

# **Answer Key**

Q1 (B) Q4 (A)

Q3 (B)

Q2

(D)

Q5 (C)



# **Hints & Solutions**

#### Q1 Text Solution:

The compound formed by loosing and gaining electrons are ionic compounds. They have high melting point.

#### **Video Solution:**



#### Q2 Text Solution:

X is a noble gas, Y is a non-metal and Z is a metal.

#### **Video Solution:**



#### Q3 Text Solution:

The correct one is formed from nonmetals. Ionic compounds are formed from metals and nonmetals.

### **Video Solution:**



#### Q4 Text Solution:

Try to write the electronic configuration, it will help to write the valency which can be used to write the chemical formula.

#### **Video Solution:**



#### Q5 Text Solution:

Cations are formed when there is an imbalance between the number of electrons and protons. Try to land to the correct answer using the above information.

#### **Video Solution:**



