UDAAN 2025

CHEMISTRY

Metals and Non-Metals

Q1 Match the following.

	Column-I		Column-II
(a)	Potassium	(i)	Burns with a dazzling white flame
(b)	Zinc	(ii)	Burns with a yellow flame
(c)	Magnesium	(iii)	Burns with a lilac flame
(d)	Sodium	(iv)	Burns with a light blue flame

(A) (a) - (iv), (b) - (iii), (c) - (ii), (d) - (i)

(B) (a) - (iii), (b) - (iv), (c) - (ii), (d) - (i)

(C) (a) - (i), (b) - (iv), (c) - (iii), (d) - (ii)

(D) (a) - (iii), (b) - (iv), (c) - (i), (d) - (ii)

Q2 What will be the colour of red and blue litmus paper when dipped in a solution of magnesium hydroxide?

(A) Red and blue litmus paper: No change

(B) Red litmus paper: No change, Blue litmus paper: Red

(C) Red litmus paper: Blue, Blue litmus paper: No change

(D) Red litmus paper: Purple, Blue litmus paper: No change

Q3 Which of the following oxide(s) of iron would be obtained on prolonged reaction of iron with steam?

(A) FeO

(B) Fe_2O_3

(C) Fe_3O_4

(D) Fe_2O_3 and Fe_3O_4

Q4 Which of the following starts to burn when sodium metal is put in water? Also, identify the type of reaction taking place.

(A) Hydrogen gas, Combination reaction

(B) Sodium hydroxide, Combination reaction

(C) Hydrogen gas, Displacement reaction

(D) Sodium, Displacement reaction

Q5 Which one will react most vigorously with cold water?

(A) Sodium

(B) Potassium

(C) Magnesium

(D) Calcium

Answer Key

Q1	(D)		**Q4**	(C)
Q2	(C)		**Q5**	(B)
Q3	(C)			

Hints & Solutions

Q1 **Text Solution:**

Try to think about the colour of flame with which sodium burnt in the live class.

Video Solution:

Q2 **Text Solution:**

Magnesium hydroxide is basic in nature. Now, try to think about the correct options.

Video Solution:

Q3 **Text Solution:**

Common name of the formed substance is magnetite.

Video Solution:

Q4 **Text Solution:**

The reaction will take place when the metal is more reactive than hydrogen. Now, try to think about the correct option.

Video Solution:

Q5 **Text Solution:**

Try to think about the speed of reaction of metal with water according to reactivity series.

Video Solution:

Android App | **iOS App** | **PW Website**