UDAAN 2025

CHEMISTRY

ACIDS, BASES and SALTS

Q1) A gas (X) reacts with the limewash applied on the walls to produce a salt (Y). Identify (X),(Y) and the type of reaction.

(A) (X): H₂: (Y): CaCO₃, Neutralisation

(P) (X): CO_2 : (Y): $CaCO_3$, Neutralisation

(C) (X): CO_2 : (Y): $Ca(OH)_2$, Precipitation

(D) (X): H₂S: (Y): Ca(OH)₂, Double displacement

Q2 Which of the following substances will not give carbon dioxide on treatment with dilute acid?

(A) Marble

(B) Limestone

(C) Baking soda

- (D) Slaked lime
- Q3 Which of the following is not a mineral acid?
 - (A) Hydrochloric acid
 - (B) Citric acid
 - (C) Sulphuric acid
 - (D) Nitric acid

Q4 Match the acids given in Column (A) with their correct source given in Column (B).

	Column A		Column B
(a)	Lactic acid	(i)	Tomato
(b)	Citric acid	(ii)	Lemon
(c)	Oxalic acid	(iii)	Curd

- (A) (a) (i), (b) (iii), (c) (ii)
- (B) (a) (ii), (b) (iii), (c) (i)
- (c) (a) (iii), (b) (ii), (c) (i)
- (D) (a) (i), (b) (ii), (c) (iii)
- **Q5** Which among the following is incorrect?
 - (A) $Zn(s) + 2dil. HCl(aq) \rightarrow ZnCl_2(aq) + H_2(\uparrow)$
 - (B) $Mg(s) + 2dil. H_2SO_4(aq) \rightarrow MgSO_4(aq) + H_2(\uparrow)$
 - (C) $2Al(s) + 6dil.HCl(aq) \rightarrow 2AlCl_3(aq) + 3H_2(\uparrow)$
 - (D) $Cu(s) + 2dil.HCl(aq) \rightarrow CuCl_2(aq) + H_2(\uparrow)$

Answer Key

Q1 (B) Q4 (C)

Q2 (D) Q5 (D)

Q3 (B)



Hints & Solutions

Q1 Text Solution:

Hint: Metal carbonate/bicarbonate + Acid → Salt + Carbonic Acid

Carbonic acid further dissociates.

Video Solution:



Q2 Text Solution:

slaked line (calcium hydroxide) on treatment with acid does not release carbondioxide gas . whereas any metal carbonate or bicarbonate on reaction with acid release - salt, water and carbondioxide .

Video Solution:



Q3 Text Solution:

Hint: Identify the one obtained from plants and animals.

Video Solution:



Q4 Text Solution:

Citrus fruits contain citric acid.

Video Solution:



Q5 Text Solution:

The metal below hydrogen in the reactivity series can't displace it.

Video Solution:



