UDAAN 2025 DHA 06

CHEMISTRY

ACIDS, BASES & SALTS

Q1 Match the following.

(a)	Sodium carbonate	(i)	Base
(b)	Sodium chloride	(ii)	Acidic salt
(c)	Ammonium chloride	(iii)	Basic salt
(d)	Sodium hydroxide	(iv)	Neutral salt

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

Q2 Assertion (A): Caustic soda is prepared by chlor-alkali process.
Reason (R): Brine solution on passing electricity decomposes to form NaOH,Cl_2 and H_2.
(A) Both (A) and (R) are true and (R) is the correct explanation of (A)
(B) Both (A) and (R) are true but (R) is not the correct explanation of (A)
(C) (A) is true but (R) is false
(D) (A) is false but (R) is true

Q3 Identify A,B and C through the given options.

Chemical name	Common name
A	Caustic soda
B	Blue vitriol
Sodium hydrogen carbonate	C

(A) A: $KOH, B : CuSO_4 \cdot 5H_2O, C : NaHCO_3$
(B) A: $NaHCO_3, B : Na_2CO_3 \cdot 10H_2O, C : Na_2CO_3$
(C) A: NaOH, B: $CuSO_4 \cdot 5H_2O, C : NaHCO_3$
(D) A: $NaOH, B : CuSO_4, C : Na_2CO_3$

Q4 Which among the following is the correct chemical formula of bleaching powder?
$CaCO_3$ $CaOCl_2$
(C) $Ca(OH)_2$ (D) $NaHCO_3$

Q5 Chlorine gas reacts with dry slaked lime to form bleaching powder and water vapour.
(A) True (B) False

Answer Key

Q1 (D)

Q2 (A)

Q3 (C)

Q4 (B)

Q5 true

Hints & Solutions

Q1 **Text Solution:**

The cationic part of the salt comes from the base while the anionic part comes from the acid. Now, try to identify the acid and base from which these salts are formed.

Video Solution:

Q2 **Text Solution:**

Common name of NaOH is caustic soda.Now, try to think about both the statements.

Video Solution:

Q3 **Text Solution:**

Caustic Soda: NaOH, Blue Vitriol: $CuSO_4.5H_2O$, Sodium hydrogen carbonate: $NaHCO_3$

Video Solution:

Q4 **Text Solution:**

Chemical name of the bleaching powder is Calcium oxychloride. Try to think about the correct chemical formula.

Video Solution:

Q5 **Text Solution:**

if dry slaked lime reacts with chlorine (extracted from chlor alkali process) gives calcium oxy chloride(bleaching powder and water vapours tehrefore above statement is true.

bleaching powder formation is from NaCl as a raw material .

Video Solution: