Foundation

UDAAN 2025

CHEMISTRY

DHA 06

Metals and Non-Metals

Q1 Statement I: All non-metals are poor conductors of heat and electricity.
Statement II: Oxides of non-metals are neutral as well as acidic while that of metals are basic as well as amphoteric in nature.
(A) Statement I is true while Statement II is false.
(B) Both statements are true.
(C) Statement I is false while Statement II is true.
(D) Both statements are false.

Q2 Metals are refined by using different methods. Which of the following metals are refined by electrolytic refining?
(i) Zn
(ii) Cu
(iii) Na
(iv) K
(A) (i) and (ii) (B) (i) and (iii)
(C) (ii) and (iii) (D) (iii) and (iv)

Q3 For which among the following metals, smelting can't be used to reduce the metal oxide to metal?
(A) Zn (B) Fe
(C) Pb (D) Mn

Q4 During electrolytic refining of zinc, it gets:
(A) deposited on cathode
(B) deposited on anode
(C) deposited on cathode as well as anode
(D) remains in the solution

Q5 Which of the following metals are obtained by electrolysis of their chlorides in molten state?
(i) Na
(ii) Ca
(iii) Fe
(iv) Cu
(A) (i) and (iv) (B) (iii) and (iv)
(C) (i) and (iii) (D) (i) and (ii)

Answer Key

Q1 (C)

Q2 (A)

Q3 (D)

Q4 (A)

Q5 (D)

Hints & Solutions

Q1 **Text Solution:**

Generally, non-metals are poor conductors of heat and electricity. But graphite (purely made up of non-metal carbon) is a good conductor.

Video Solution:

Q2 **Text Solution:**

metals on top of reactivity series do not require refining process. So now look for your answer.

Video Solution:

Q3 **Text Solution:**

smelting is the process when C is used as reducing agent.

Mn is extracted by aluminothermy(Al is used as reducing agent).

Video Solution:

Q4 **Text Solution:**

Hint: Cation moves to the cathode while anion moves to the anode. Think about this in detail to land to the correct answer.

Video Solution:

Q5 **Text Solution:**

High reactive metalslike sodium , potassium, calcium etc... are found in majorly chloride, oxide form in nature.

There extraction is done by electrolytic reduction of molten ore.

Video Solution: