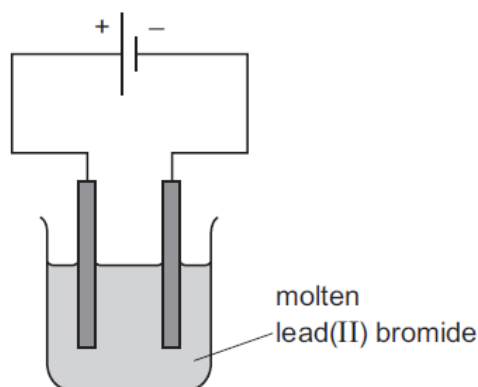


1. June/2022/Paper_11/No.16

Lead(II) bromide is electrolysed using inert electrodes.



Which statement is correct?

- A A brown gas is seen at the positive electrode.
- B Electrons pass through the solution from one electrode to the other.
- C Ions pass through the circuit from one electrode to the other.
- D The lead(II) ions are oxidised.

2. June/2022/Paper_11/No.17

Compound X is sodium iodide, NaI.

Compound Y is methyl methanoate, HCO₂CH₃.

At room temperature and pressure,1..... solid. In aqueous solution,2..... electricity.

Which words correctly complete gaps 1 and 2?

	1	2
A	both X and Y are	both X and Y conduct
B	both X and Y are	only X conducts
C	only X is	both X and Y conduct
D	only X is	only X conducts

3. June/2022/Paper_12/No.16

Dilute sulfuric acid is electrolysed. Hydrogen gas and oxygen gas are produced.

Which row correctly describes what happens?

	oxygen produced at the	hydrogen produced at the	concentration of acid
A	anode	cathode	decreases
B	anode	cathode	increases
C	cathode	anode	decreases
D	cathode	anode	increases

4. June/2022/Paper_12/No.17

Aluminium can be extracted by the electrolysis of aluminium oxide dissolved in molten cryolite.

Which reactions take place during the electrolysis?

	reaction at the anode	reaction at the cathode
A	$Al^+ + e^- \rightarrow Al$	$O^{2-} + 2e^- \rightarrow O$
B	$Al^{3+} + 3e^- \rightarrow Al$	$2O^{2-} + 4e^- \rightarrow O_2$
C	$O^{2-} - 2e^- \rightarrow O$	$3Al^+ + 3e^- \rightarrow 3Al$
D	$2O^{2-} - 4e^- \rightarrow O_2$	$Al^{3+} + 3e^- \rightarrow Al$

5. June/2022/Paper_21/No.5(c)

(c) Aqueous iron(II) sulfate is electrolysed using graphite electrodes.

Predict the products of this electrolysis.

product at cathode

product at anode

[1]