

**THIRUVANANTHAPURAM EDUCATIONAL DISTRICT
CHEMISTRY**

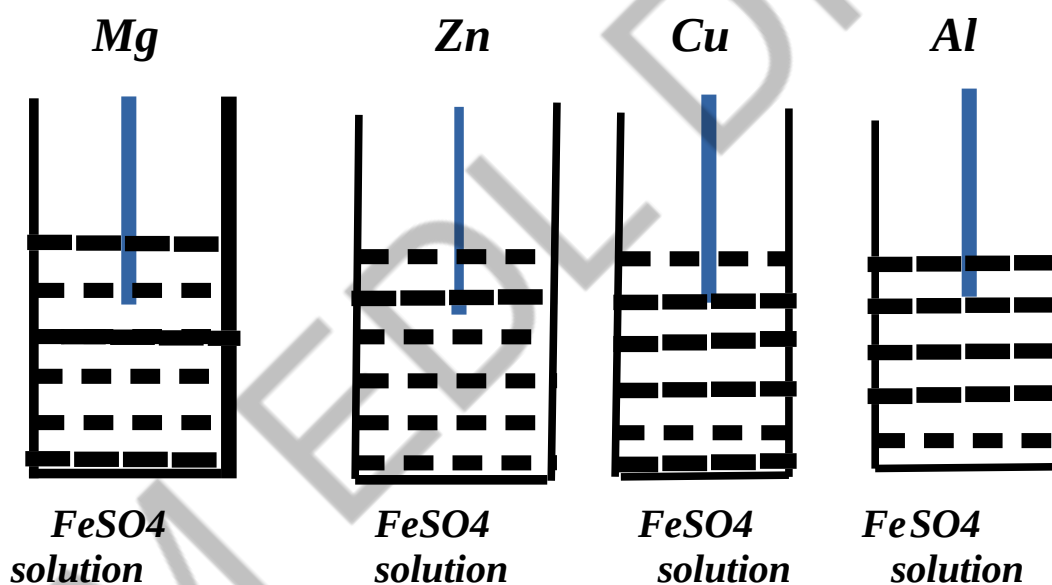
CHAPTER 3 MODULE 2

STD X

Reactivity Series and Electrochemistry

CWX3(2)

1. Some metals of reactivity series are given in the box. Analyse the picture given below and answer the questions.

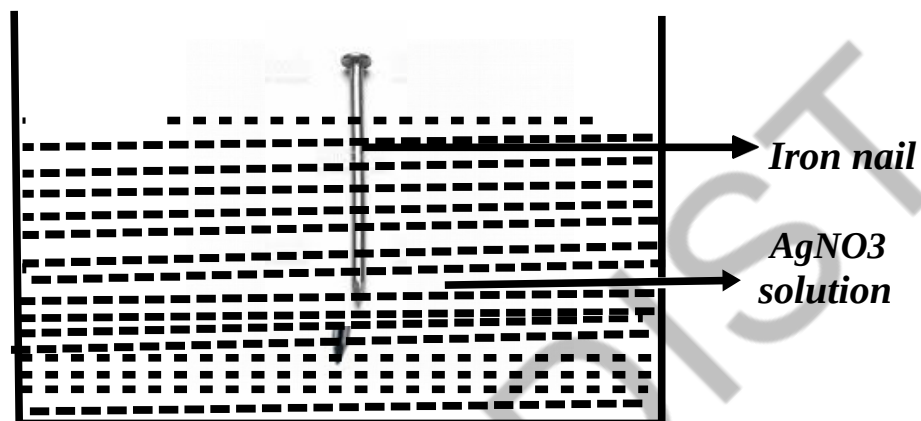


Mg
Al
Zn
Fe
Cu
Ag

a. Which metals can displace Iron (Fe) from $FeSO_4$ solution?

b. Which metal cannot displace iron? Why?

2.



a. What change is seen on the surface of iron nail?

b. Complete the chemical equation taking place here



c. Which metal is oxidised in this case?

d. Which metal is reduced?

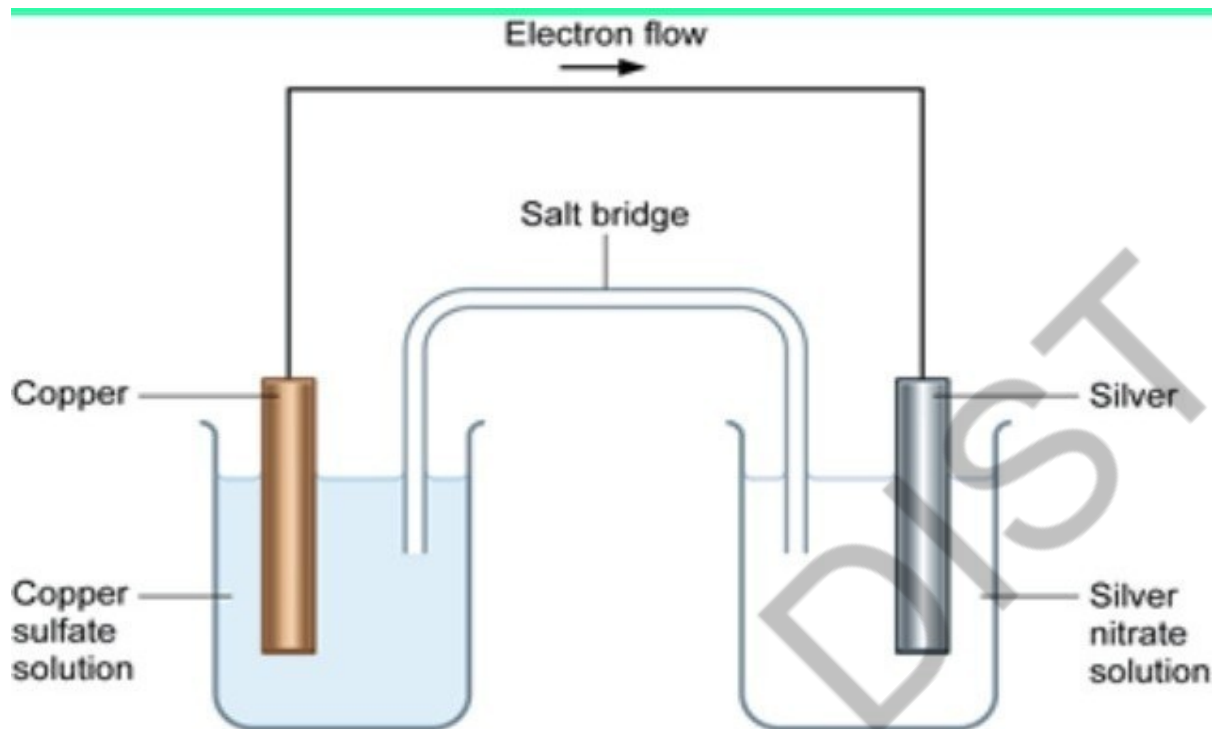
e. Write the equations showing oxidation and reduction.

Oxidation :

Reduction :

f. Which metal is displaced here?

3.



In the Galvanic cell given above

a. Which is anode and cathode here ?

b. Write the chemical reaction taking place in anode?

c. Write the chemical reaction taking place in cathode?

d. Write the redox reaction?

e. What is the direction of the electron flow?

4.

Complete the chart

<i>Cell</i>	<i>anode</i>	<i>cathode</i>	<i>Reaction at Anode</i>	<i>Reaction at Cathode</i>	<i>Redox Reaction</i>
Fe-Cu	Fe	$\text{Fe} \rightarrow \text{Fe}^{2+} + 2\text{e}^-$
Cu-Ag	Ag	$2\text{Ag} + 2\text{e}^- \rightarrow 2\text{Ag}$