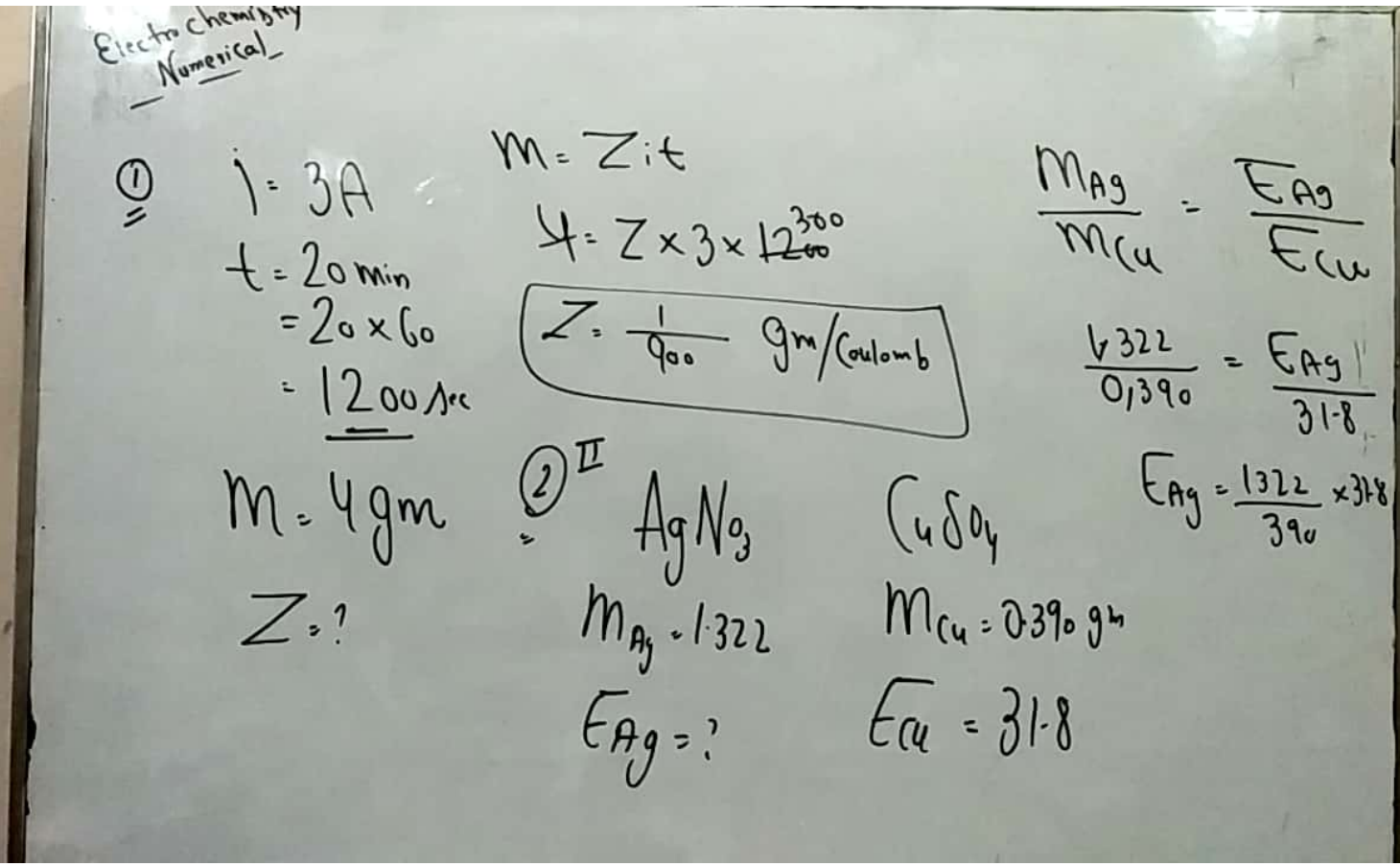

3

$i = 0.5A$

$t = 30 min$
$= 30 \times 60$
$= 1800 Sec$

$Na \rightarrow +1$
$Cu \rightarrow +2$
$Ag \rightarrow +2$
$I \rightarrow -1$

$m = ?$

$$\frac{m}{\text{at wt}} \times \text{Charge} = \frac{it}{96500}$$

$$\Rightarrow \frac{m}{63.5} \times 2 = \frac{0.5 \times 1800}{96500}$$

$$m = 0.5 \times 1800 \times 63.5$$

4

Ag

$m = 20.14$

$i = 5A$

$t = 70 min = 70 \times 60$
$= 4200 Sec$

$Z = ?$

$m = Zit$

$20.14 = Z \times 5 \times 4200$

5 $AgNO_3$ $CuSO_4$

$E_{Ag} = 108$ $E_{Cu} = 31.5$

$m_{Ag} = 45$ $m_{Cu} = ?$

$$\frac{m_{Ag}}{m_{Cu}} = \frac{E_{Ag}}{E_{Cu}}$$

$$\frac{45}{m_{Cu}} = \frac{108}{31.5}$$

6 $m = 10\ gm$

$t = 1\ hr = 3600\ sec$

$i = ?$

$$\frac{m}{at\ wt} \times Charge = \frac{it}{96500}$$

$$\frac{10}{127} \times 1 = \frac{i \times 3600}{96500}$$

7 $m = ?$

$i = 12\,A$

$t = 2hr = 2 \times 3600$

$= 7200$

$$\frac{m}{\text{at wt}} \times \text{Charge} = \frac{it}{96500}$$

$$\frac{m}{63.5} \times 2 = \frac{12 \times 7200}{96500}$$

63.5 Answer

8 $i = 0.25\,A$

$t = 1hr = 3600\,sec$

$m = ?$

$$\frac{m}{\text{at wt}} \times \text{Charge} = \frac{it}{96500}$$

$$\frac{m}{63.5} \times 2 = \frac{0.25 \times 3600}{96500}$$

Q1

$i = 0.5A$

$t = 30 \times 60 = 1800 sec$

$m = 1.006$

$Z = ?$

$m = Z i t$

$1.006 = Z \times \frac{0.5 \times 1800}{96500}$

$Z = \frac{1.006}{900}$ gm/Coulomb