

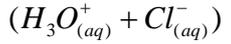
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2010/11/29 :

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### الإختبار التلائي الأول في مادة العلوم الفيزيائية

التمرين الأول :



$$V = 100mL$$

2g

t = 0s

. C = 0,1mol / L

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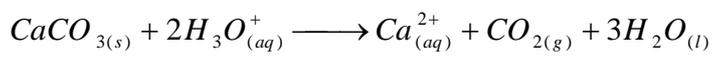
V<sub>CO<sub>2</sub></sub>

CO<sub>2</sub>

t(s)	0	20	40	60	80	100	120	140	160	180	200	220
V <sub>CO<sub>2</sub></sub> (mL)	0	29	49	63	72	79	84	89	93	97	100	103

t(s)	240	260	280	300	320	340	360	380	400	420	440
V <sub>CO<sub>2</sub></sub> (mL)	106	109	111	113	115	117	118	119	120	120	121

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/1

x<sub>max</sub>

/2

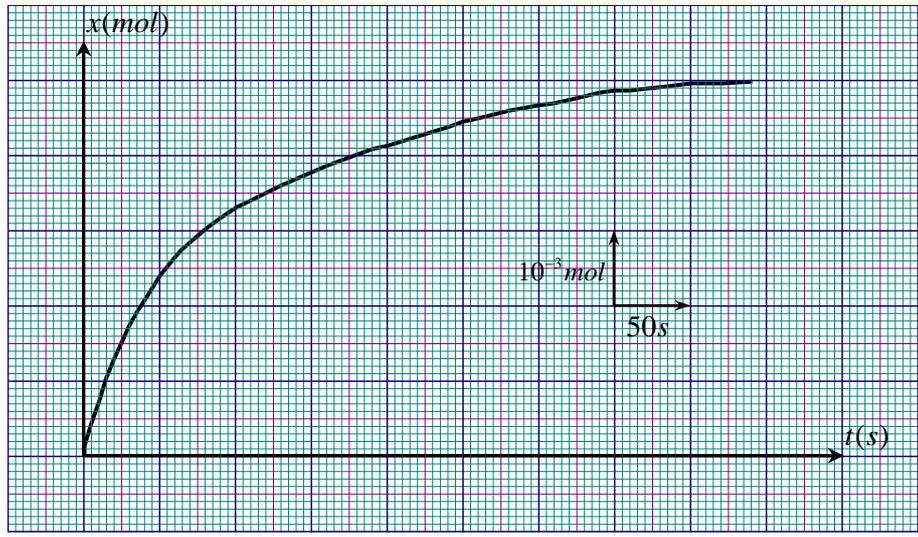
. R P T V<sub>CO<sub>2</sub></sub>

/ 13

x

CO<sub>2</sub>

/



/4

$$x = f(t)$$

/

. V

x

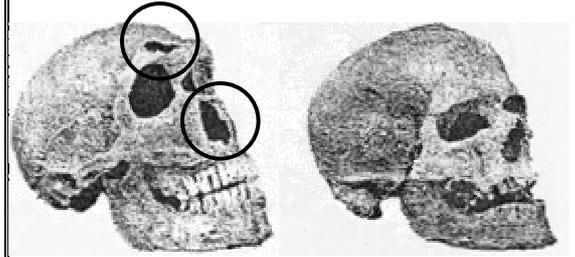
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T = 298° K P = 1,02 × 10<sup>5</sup> Pa :

C = 12g / mol R = 8,31SI

Ca = 40g / mol O = 16g / mol

التمرين الثاني :



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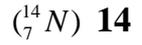
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$\beta^-$

14

/2

. 5570 ans

14

/3

$t = 0$

$N_0$

/4

$5t_{1/2}$   $4t_{1/2}$   $3t_{1/2}$   $2t_{1/2}$   $t_{1/2}$

14

$N$

$N_0$

/

$N$

/

$t_{1/2} \rightarrow 2cm$   $N_0 \rightarrow 10cm$  :

/

$\frac{N(^{14}_6C)}{N(^{12}_6C)}$

: II - الأتية

$N$

/1

/4

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	$\frac{N}{N_0}$
	0,9399
	0,9057

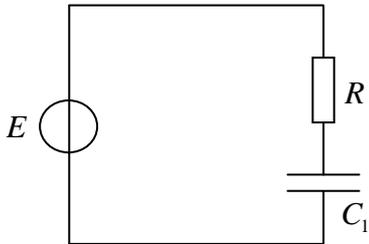
$R = 1K\Omega$

$C_1 = 150 \mu F$

: التمه الثالث

(1)

$E = 200V$



(1)

$\tau$

/1

$q$

/2

$E_C$

/3

$C_2 = 100 \mu F$

/4

$q_2$   $q_1$

(2)

$q_2$   $q_1$   $q$

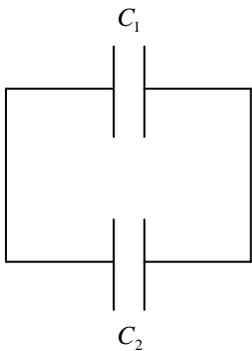
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$q_2$   $q_1$   $C_2$   $C_1$

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(2)

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