

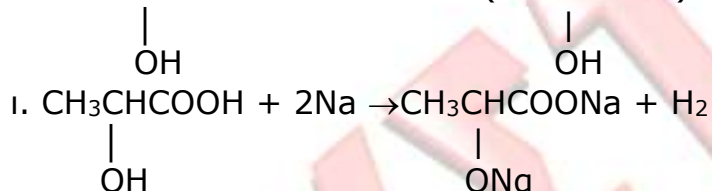
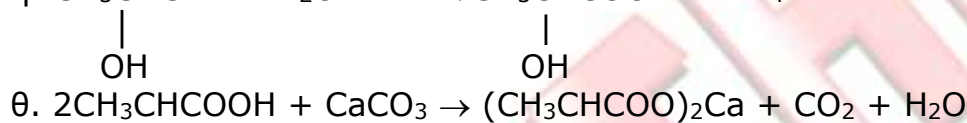
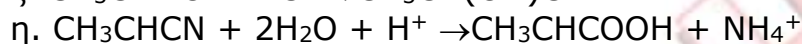
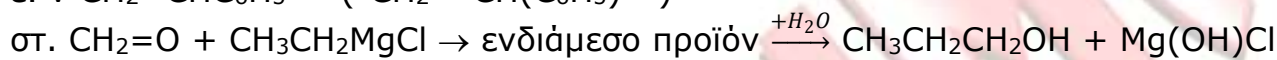
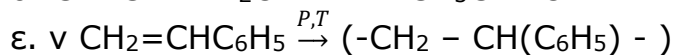
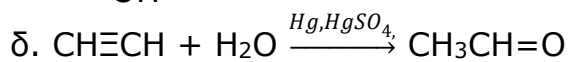
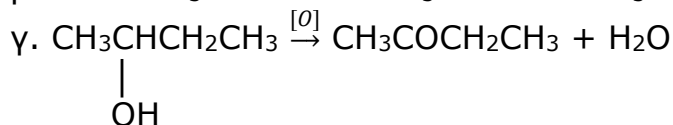
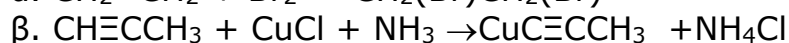
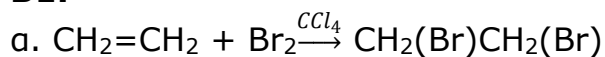
ΑΠΑΝΤΗΣΕΙΣ ΧΗΜΕΙΑΣ Β ΛΥΚΕΙΟΥ
31/03/2019

ΘΕΜΑ Α

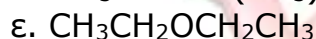
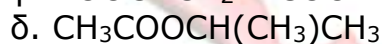
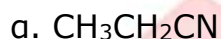
A1. δ A2. α A3. γ A4. δ A5. δ

ΘΕΜΑ Β

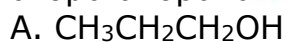
B1.



B2.



B3. Μρεστέρα = 116 άρα $12n+2n+32=116$ άρα $n=6$ επομένως η αλκοόλη είναι με 3 άτομα άνθρακα και πρωτοταγής



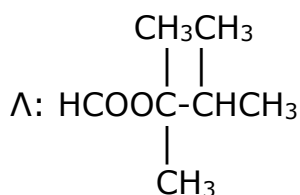
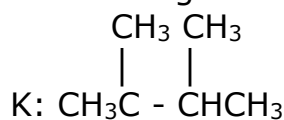
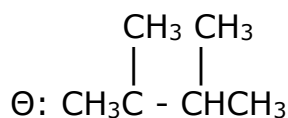
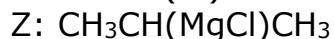
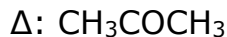
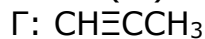
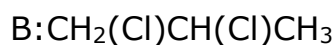
ΘΕΜΑ Γ

Γ1.

$PV=nRT$

$n=0,1 \text{ mol } M_r=42$

άρα A: $\text{CH}_2=\text{CHCH}_3$



Γ2.

Δοχείο 1 : αιθανάλη

Δοχείο 2: διαυθυλαιθέρας

Δοχείο 3: 2 προπανόλη

Δοχείο 4: μέθυλο - 2 - προπανόλη

Δοχείο 5: αιθανικό οξύ

Δοχείο 6: αιθένιο

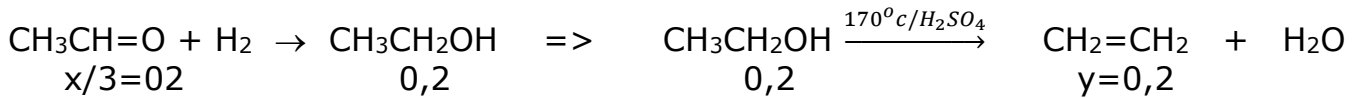
Δοχείο 7 : αιθίνιο



$$n_A = \frac{m}{Mr} \Rightarrow \frac{x}{3} = \frac{12}{60} \Rightarrow x = 0,6 \text{ mol}$$

Άρα η μάζα της αιθανόλης: $m = n \cdot Mr = 0,6 \cdot 44 = 26,4 \text{ g}$.



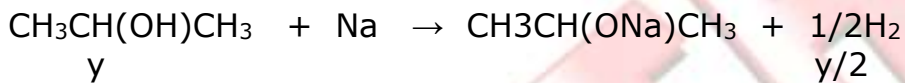
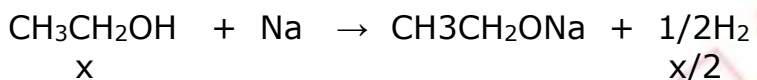


A: CH_3COOH αιθανικό οξύ
B: $\text{CH}_3\text{CH}(\text{OH})\text{CN}$ 2-υδροξύ-προπανονιτρίλιο
Γ: $\text{CH}_3\text{CH}_2\text{OH}$ αιθανόλη
Δ: $\text{CH}_2=\text{CH}_2$ αιθένιο

$$n_{\Delta} = \frac{V}{22,4} \Rightarrow V = 0,2 \cdot 22,4 = 4,48\text{L}$$

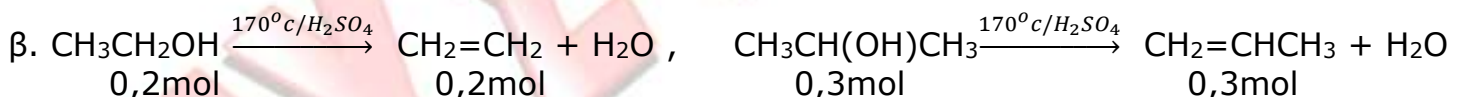
Δ2. α. Έστω: x mol $\text{CH}_3\text{CH}_2\text{OH}$ και y mol $\text{CH}_3\text{CH}(\text{OH})\text{CH}_3$

$$m_{\text{ολ}} = m_1 + m_2 \Rightarrow \underline{27,2 = x \cdot 46 + y \cdot 60} \quad (1)$$



$$n_{\text{H}_2} = \frac{V}{22,4} \Rightarrow \frac{x}{2} + \frac{y}{2} = 0,25 \Rightarrow \underline{x + y = 0,5} \quad (2)$$

Από σχέση (1) και (2): $x=0,2\text{mol}$ $y=0,3\text{mol}$



$$n_{\text{Br}_2} = z + \omega = 0,5\text{mol} \Rightarrow m = n \cdot M_r \Rightarrow m = 80\text{g}$$

10g Br_2 σε 100mL διαλύματος
80g Br_2 σε x mL διαλύματος
 $x=800\text{mL}$ διαλύματος.

Τις απαντήσεις επιμελήθηκαν οι καθηγητές:
Αλέξανδρος Αλεξίου
Λίνα Βλάχου