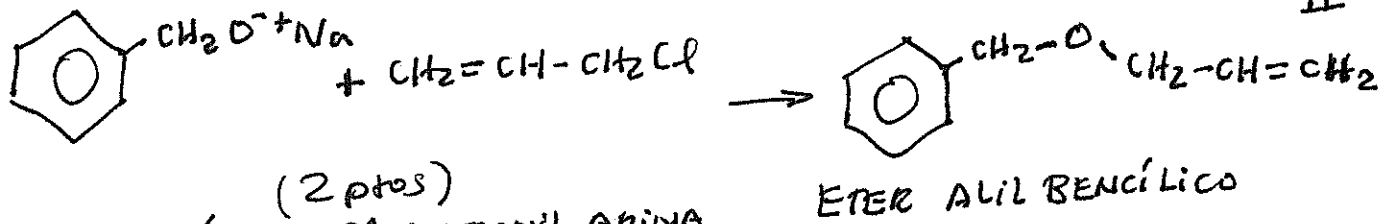
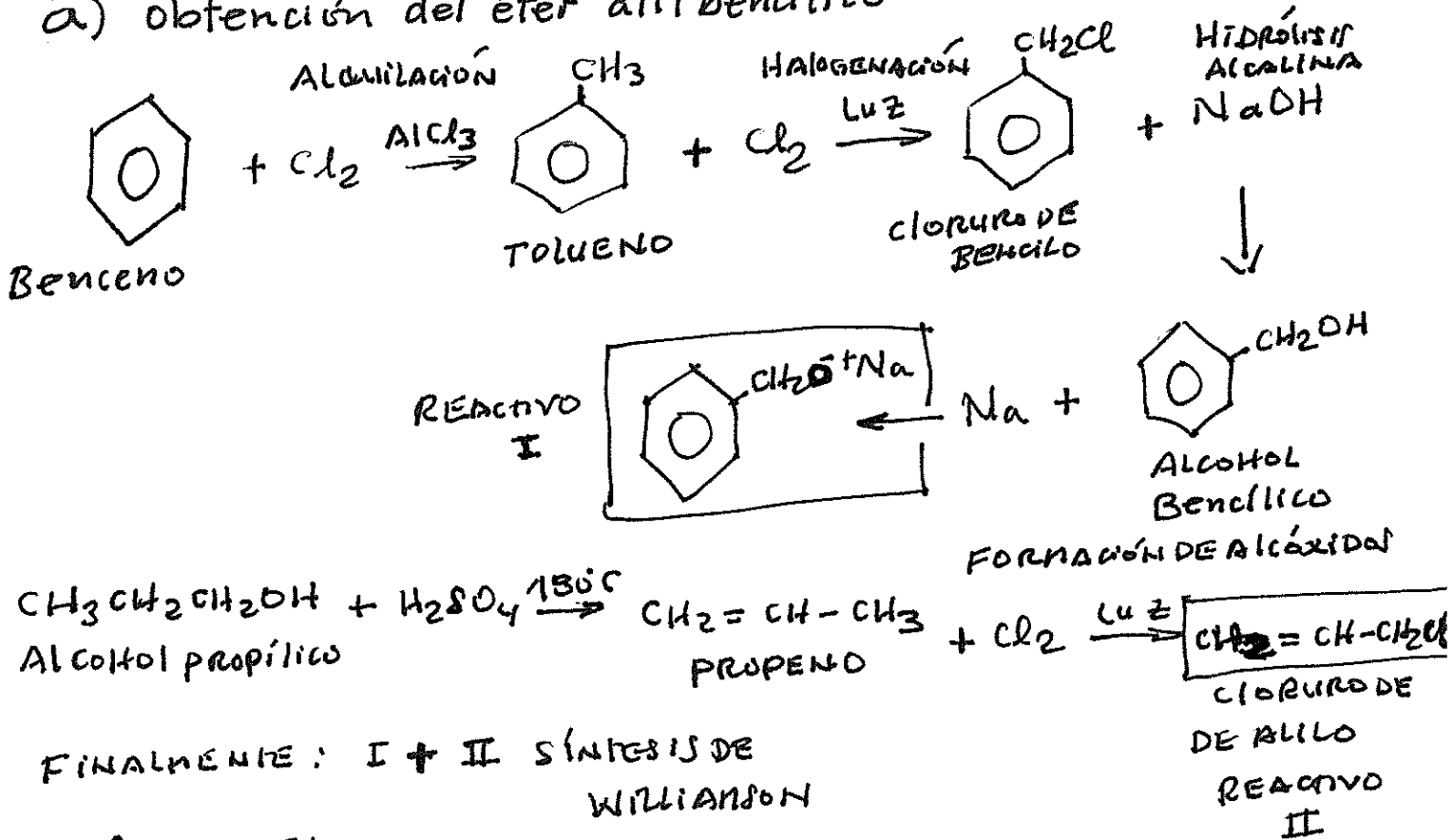


SOLUCIONARIO DEL EXAMEN FINAL DE QUÍMICA II (AA-223 F y G)

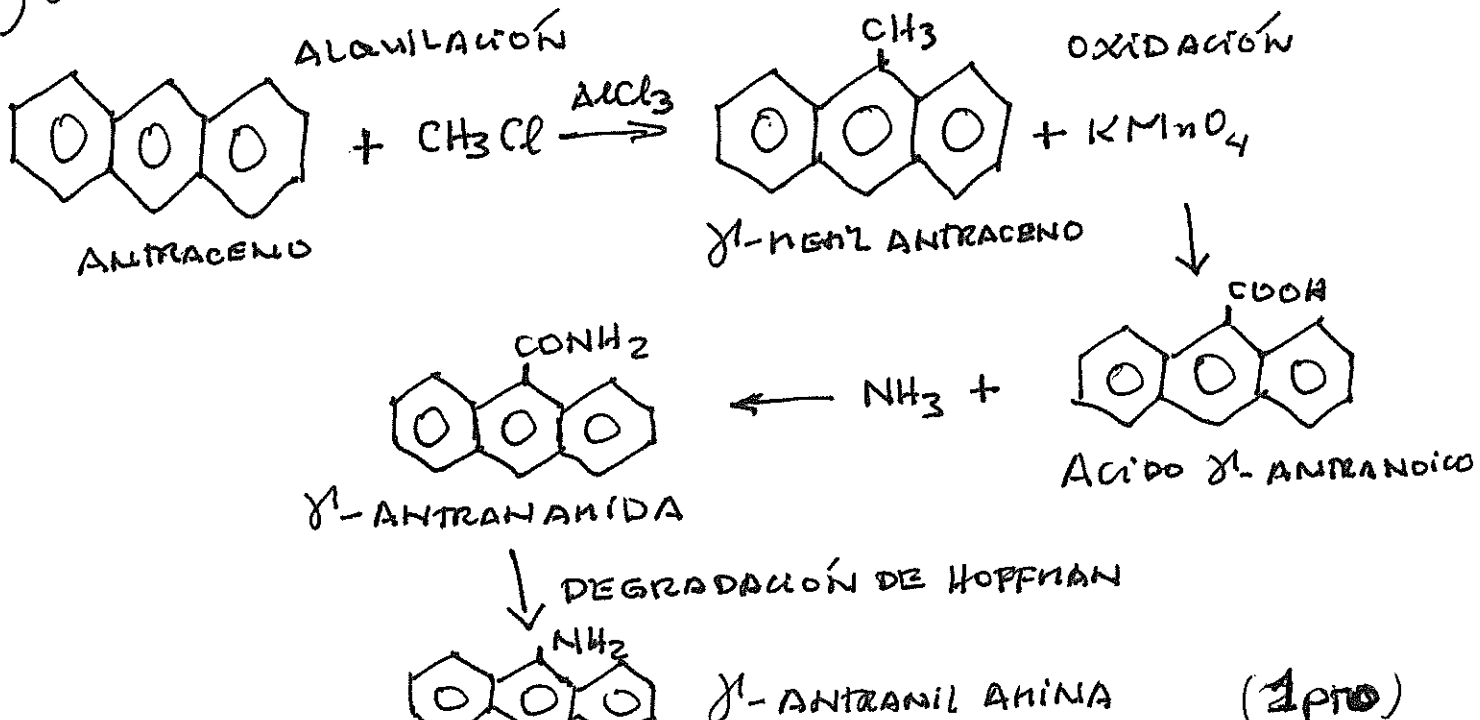
PROF. ING. JUAN GARAY

SOL 1

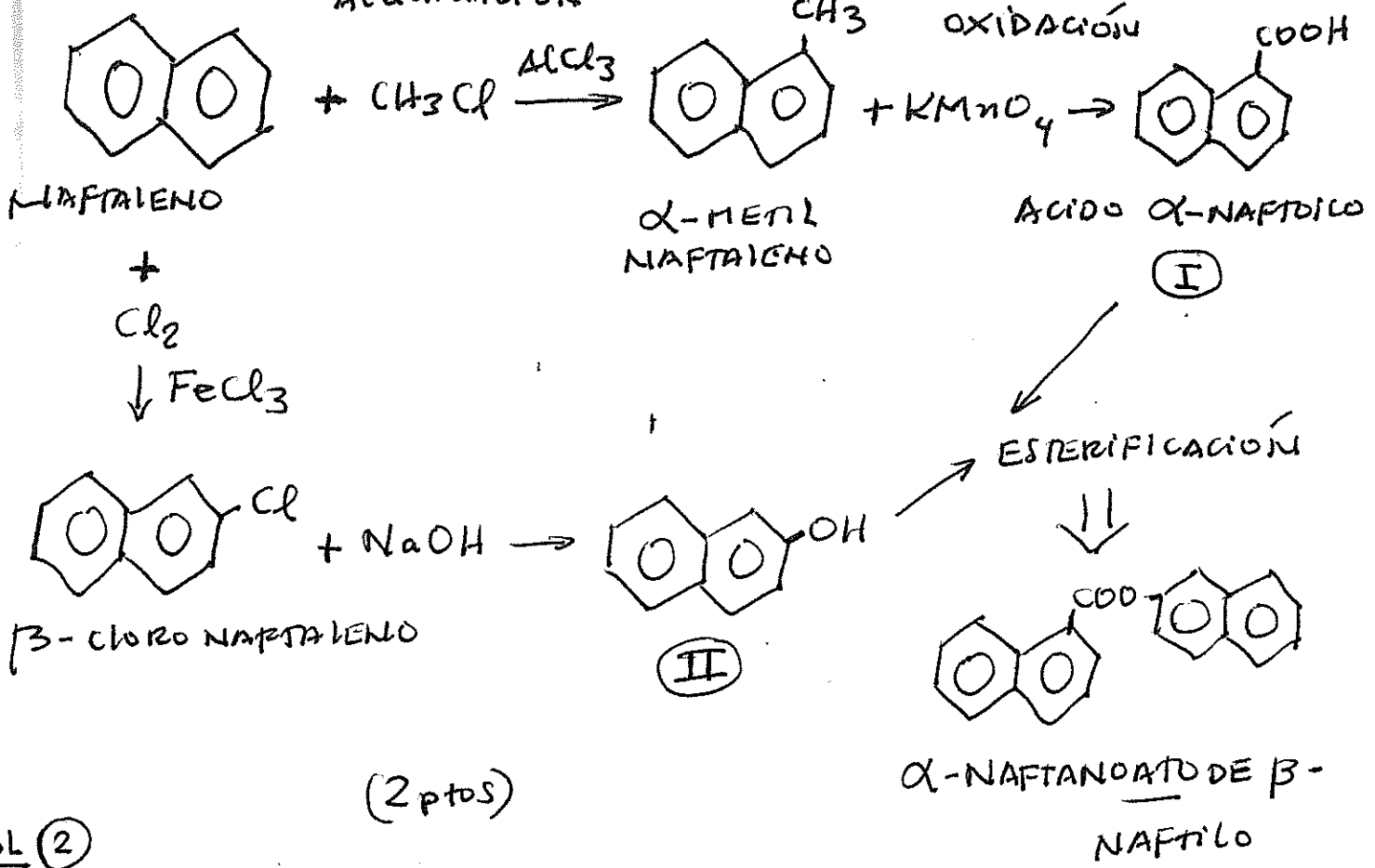
a) obtención del éter alil bencílico



b) OBTENCIÓN DEL γ -ANTRANILINA (2 pts)

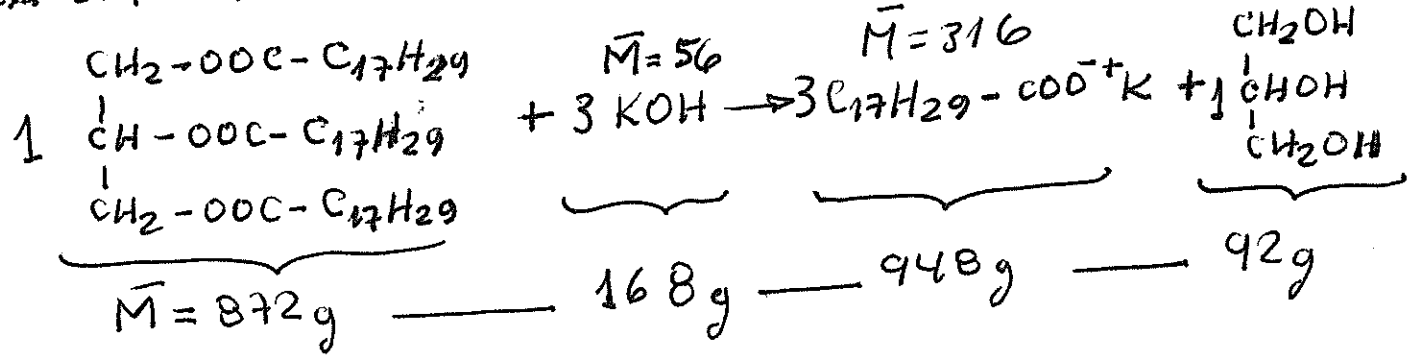


C) OBTENCIÓN DEL α -NAFTANOATO DE β -NAFTILO
ALQUILACIÓN



SOL (2) (2 pts)

LA SAPONIFICACIÓN ES:



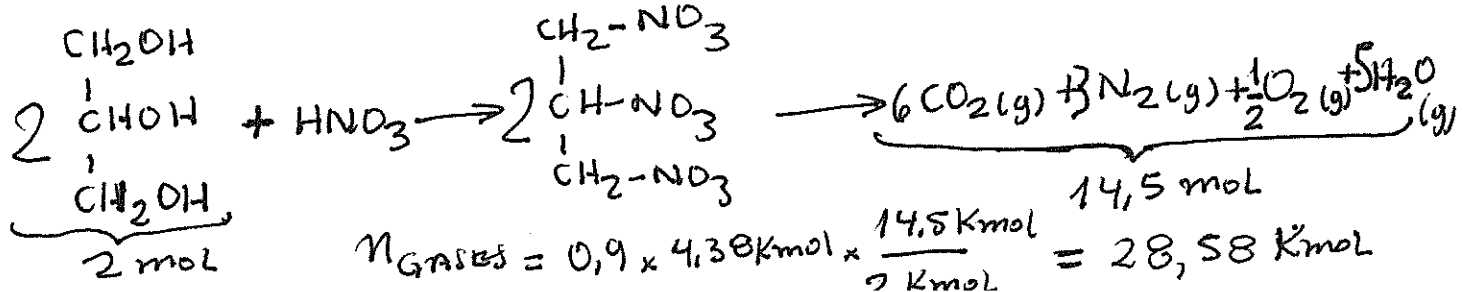
$$4752 \frac{\text{lb}}{\text{día}} \times \frac{1 \text{ kg}}{2,2 \text{ lb}} \times \frac{1 \text{ día}}{24 \text{ h}} = 10 \frac{\text{kg}}{\text{h}} \quad ? \quad ?$$

SE COMPRUEBA QUE EL REACTIVO LIMITANTE ES EL KOH

$$\dot{M}_{\text{JABON}} = 56,43 \frac{\text{kg}}{\text{h}} \times 0,8 = \boxed{45,14 \frac{\text{kg}}{\text{h}}} ; n_{\text{GLICERINA}} = 4,38 \text{ kmol}$$

(2 pts)

REACCIONES DE LA GLICERINA:

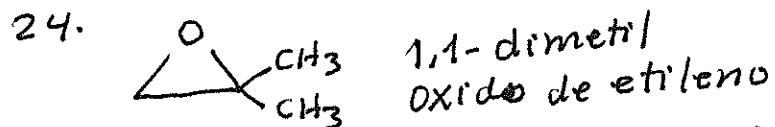
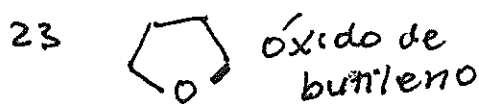
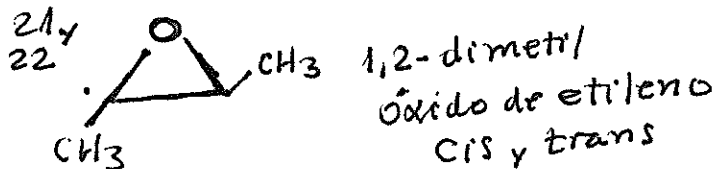
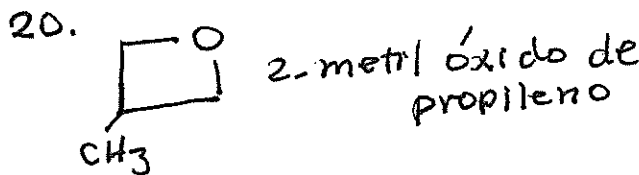
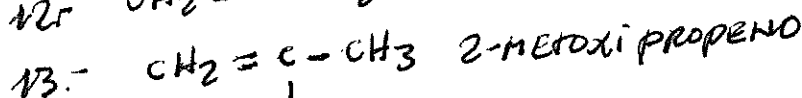
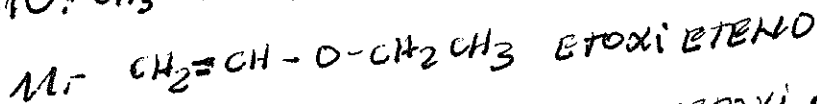
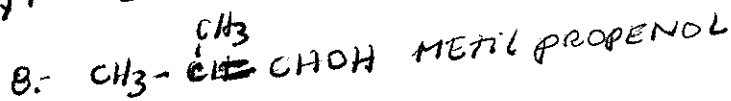
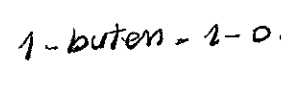
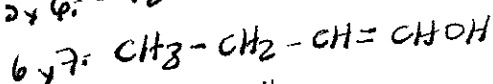
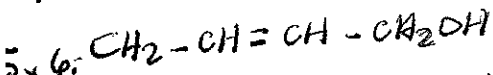
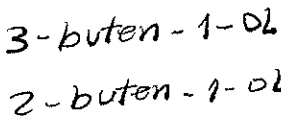
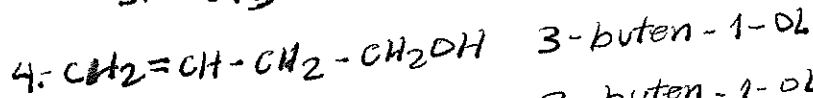
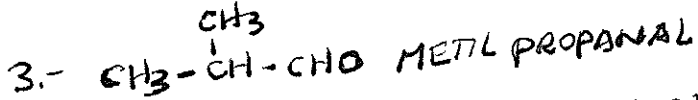
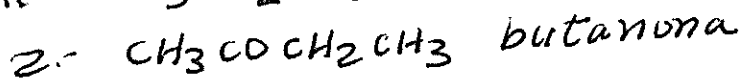
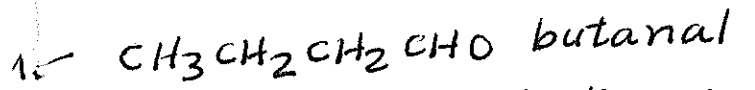


$$V_{\text{GASES}} = \frac{n \cdot R \cdot T}{P} = \frac{(28,58)(0,082)(573)}{1} = \boxed{1342,86 \frac{\text{m}^3}{\text{h}}}$$

SOL ③

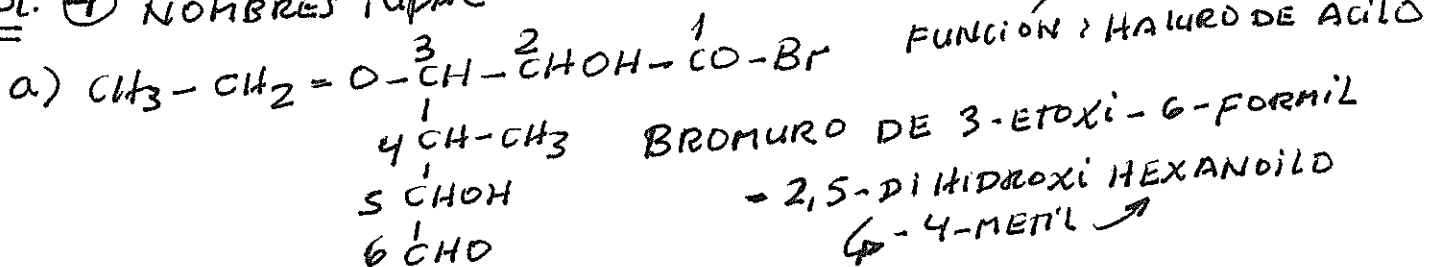
CON FÓRMULA GLOBAL C_4H_8O , los isómeros son:

(2 pts)

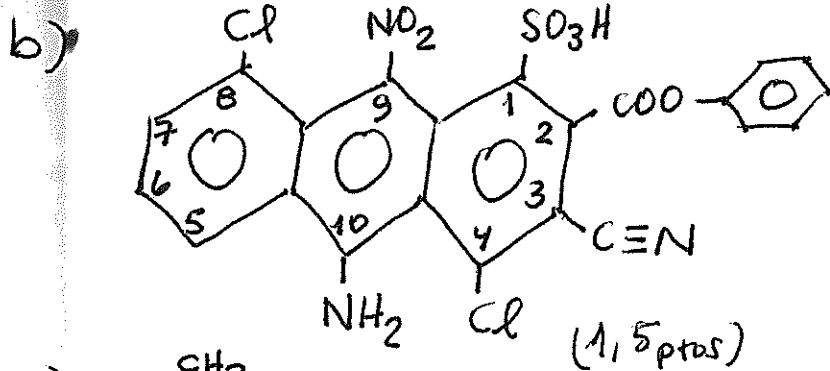


TOTAL 24 ISÓMEROS. (3 puntos)

SOL ④ NOMBRES IUPAC



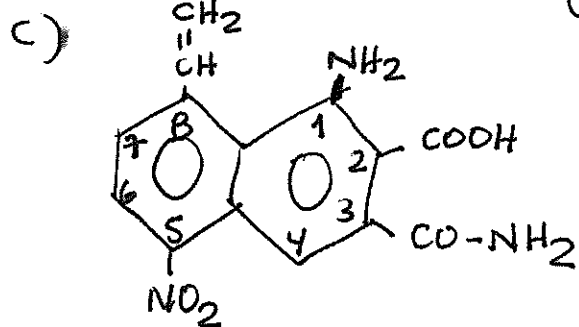
(1 punto)



FUNCION ACIDO SULFONICO

ACIDO 10-AMINO-3-CIANO-4,8-DICLORO-2-FENOXICARBONIL-9-NITRO ANTRACENOSULFONICO

(1,5 pts)

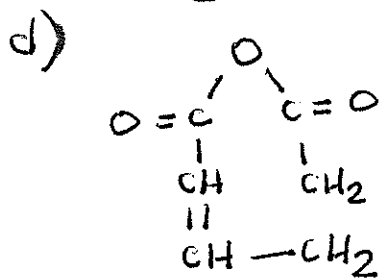


FUNCION ACIDO CARBOXILICO

ACIDO 1-AMINO-3-CARBAMIL-5-NITRO-

8-VINIL-2-NAFTOICO

(1,5 pts)



ANHIDRIDO DE ACIDO PROPANICO

y ACIDO PROPANICO

(1 PTO)

SOL (5)

a) un aldehído reacciona o reduce al reactivo de Tollens
una cetona no reduce el reactivo de Tollens

b) un alcohol terciario es más reactivo que el alcohol primario, se demuestra con el ensayo de Lucas

c) un alqueno reacciona por adición

un alquino reacciona por adición y sustitución de H del enlace triple con metales Ej. $Ag^+ - C \equiv C^- + Ag$

ACETILURO DE PLATA

(3 puntos)