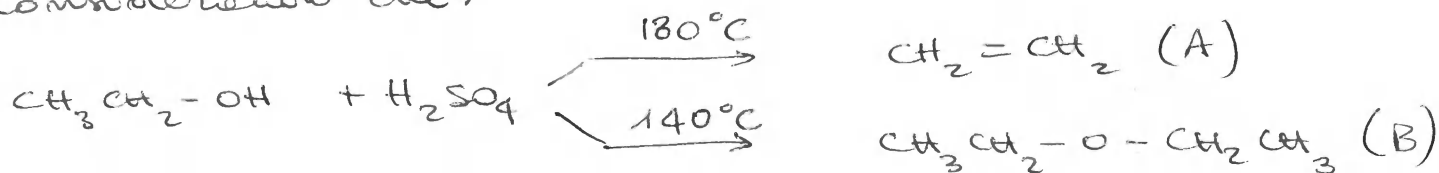


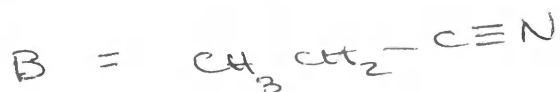
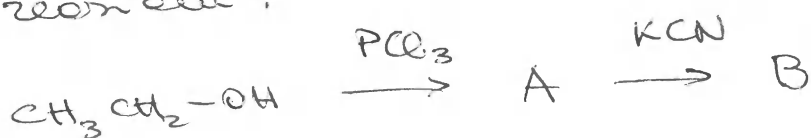
① Considerando che:



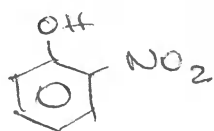
Si indichi il tipo di reazione che avviene nei due casi e il motivo per cui si forma l'etene alle temperature più alte.

R: la reazione (A) avviene con meccanismo E2, la reazione (B) è una S_N2.
Le Eliminazioni sono favorite a Temperature più alte perché avvengono con aumento di entropia e siccome $\Delta G = \Delta H - T\Delta S$ questa reazione concorre a un $\Delta G < 0$ soprattutto a temperature elevate.

② Si completi la seguente catena di reazioni:



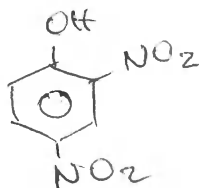
③ Disporre i seguenti composti in scala di acidità decrescente:



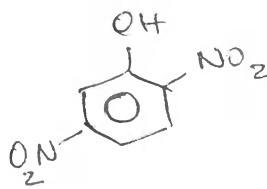
A



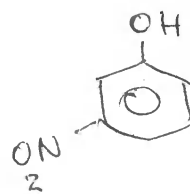
B



C



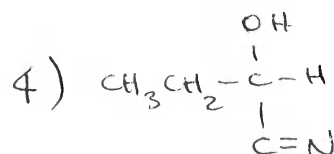
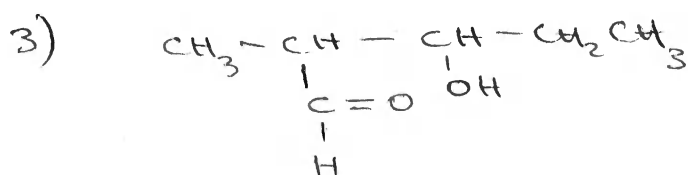
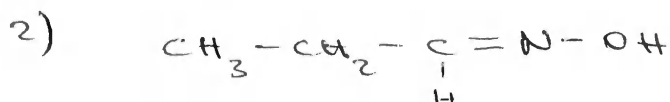
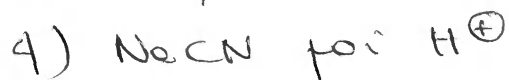
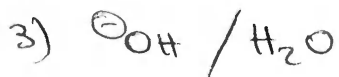
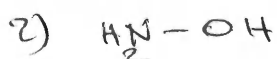
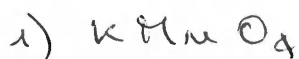
D



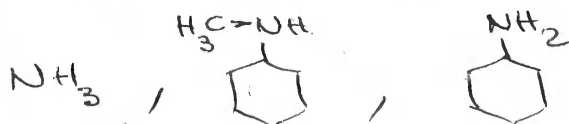
E



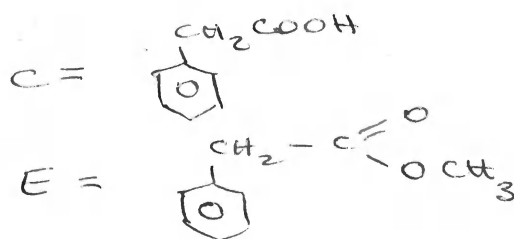
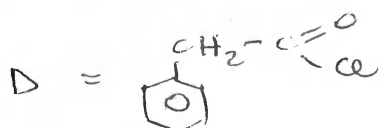
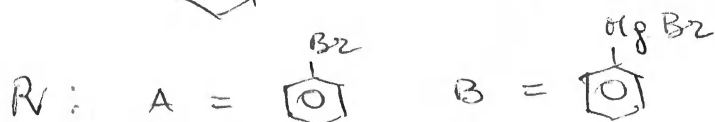
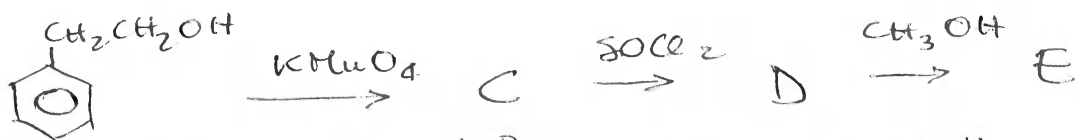
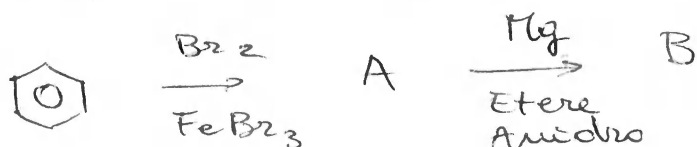
④ Scrivere i prodotti di reazione del propanale con



⑤ Mettere i seguenti composti in ordine di basicità decrescente

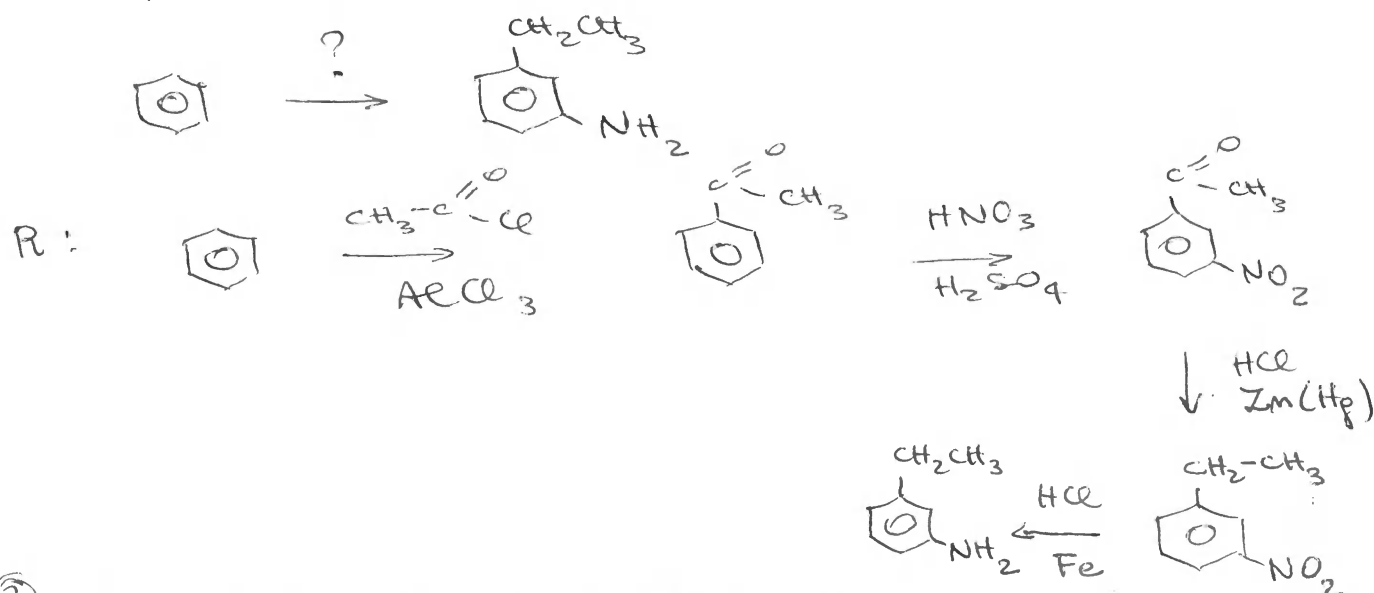


⑥ Completare la seguente serie di reazioni sostituendo alle lettere i prodotti opportuni.

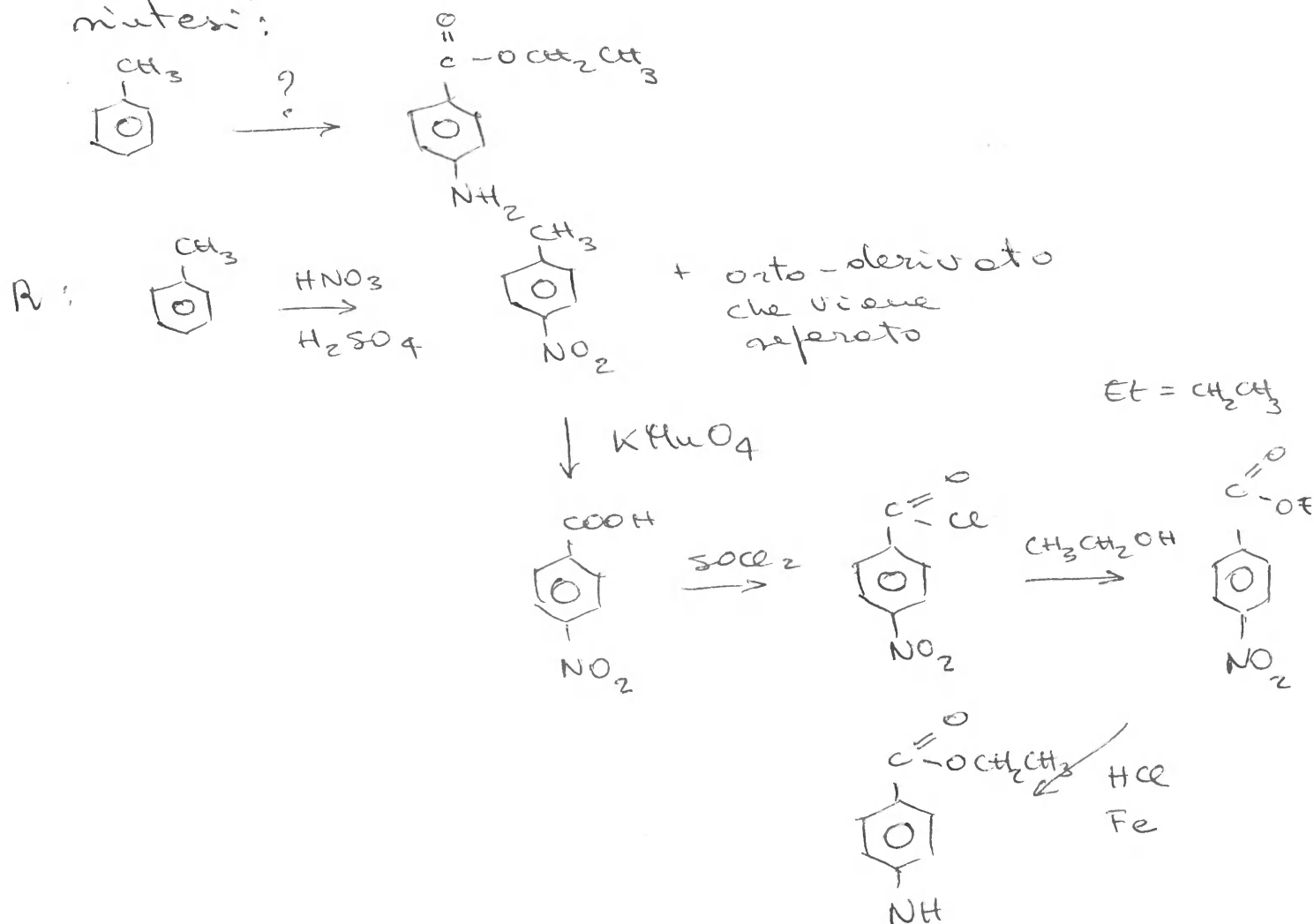


7

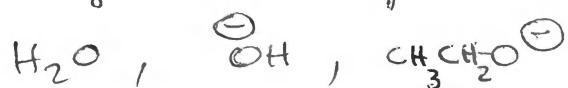
Si propone una via di sintesi;



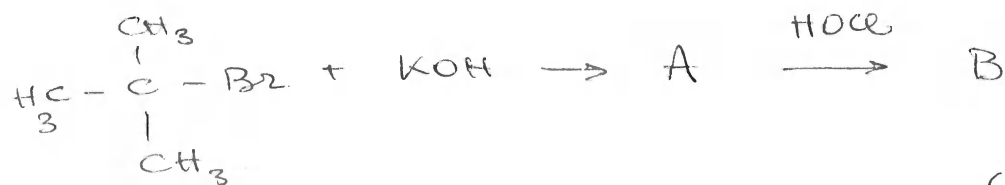
8 Si propone una via di sintesi:



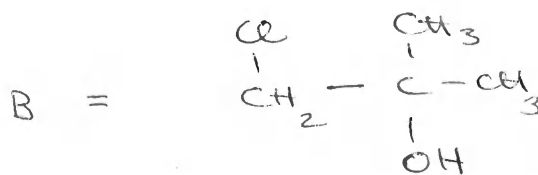
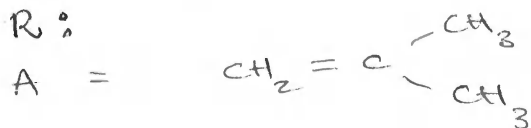
9 Si scrivono i seguenti nucleofili dal più forte al più debole



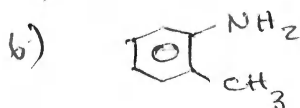
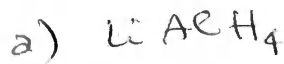
10) Si sostituiscono alle lettere i prodotti opportuni:



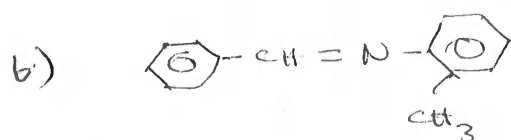
R:



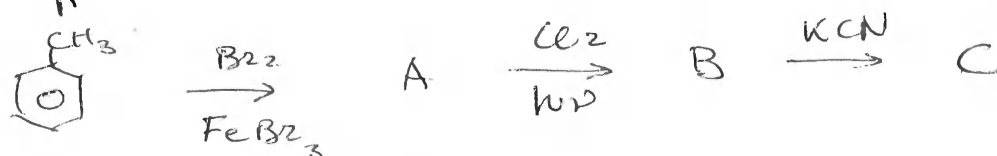
11) Scrivere i prodotti per la reazione delle benzaldeidi con:



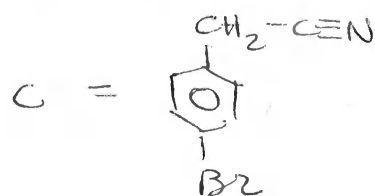
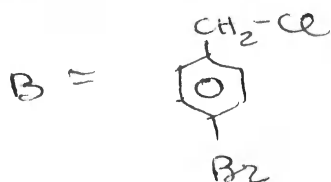
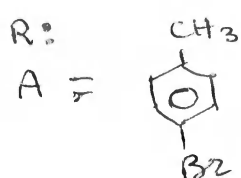
R:



12) Si completi la seguente serie di reazioni sostituendo alle lettere i prodotti opportuni:

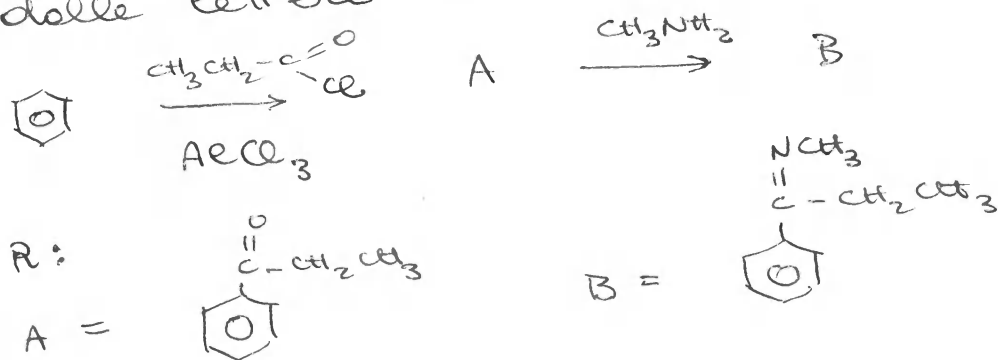


Per A si consideri solo un isomero di struttura



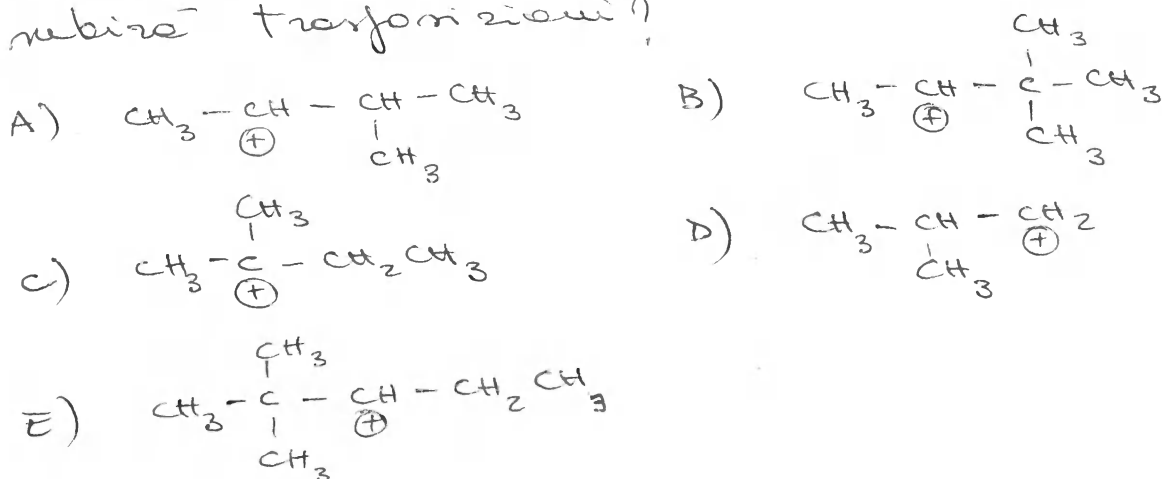
13

Descrivere i prodotti: controseguiti delle lettere



14

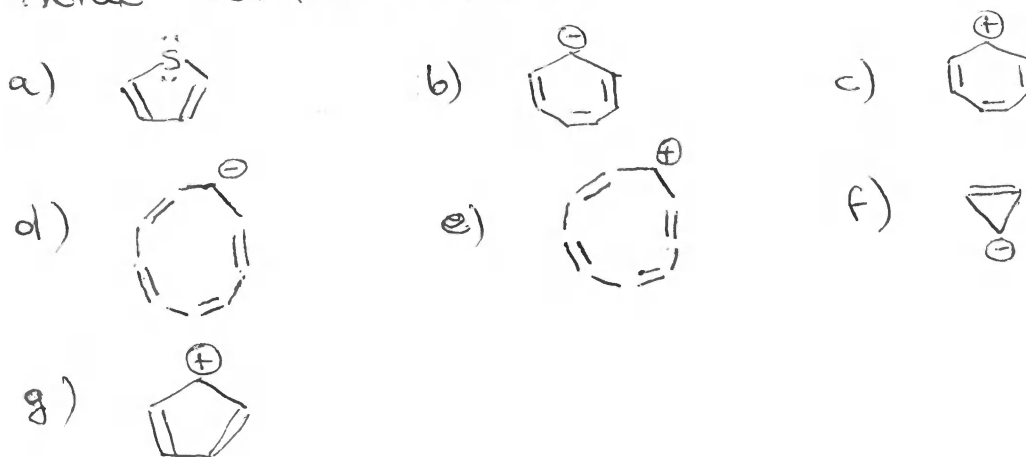
Quale dei seguenti carbocationi NON subisce trasformazioni?



R: C

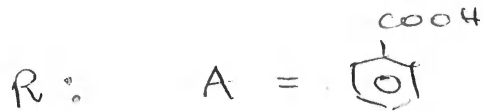
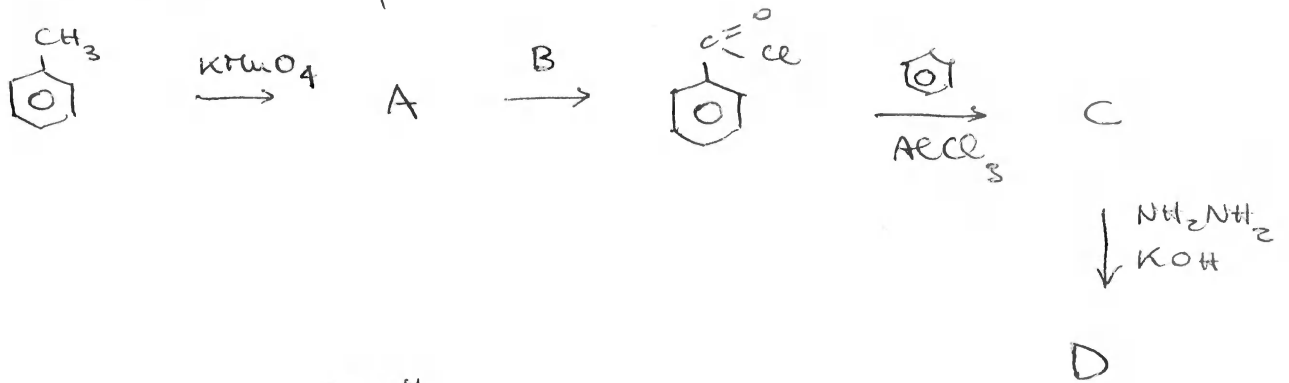
15

Si ricorre alle regole di Hückel per indicare se le seguenti specie planari sono aromatiche o meno

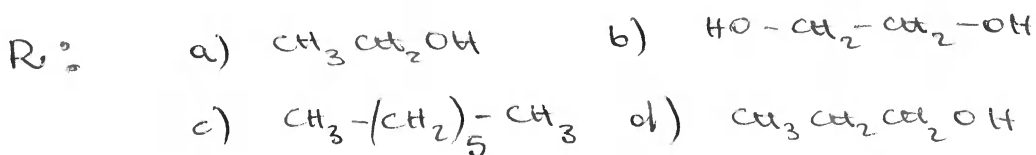
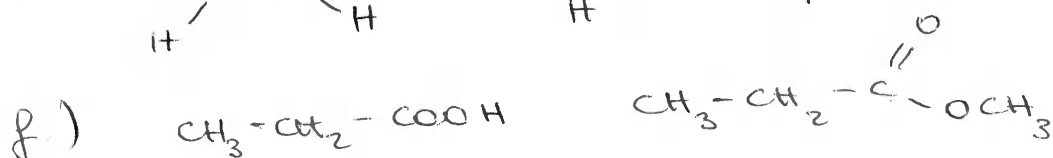
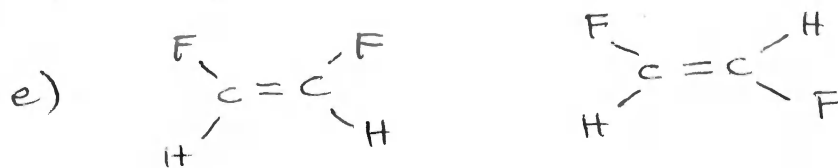
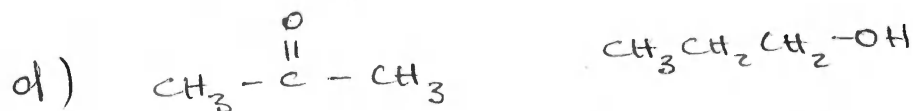
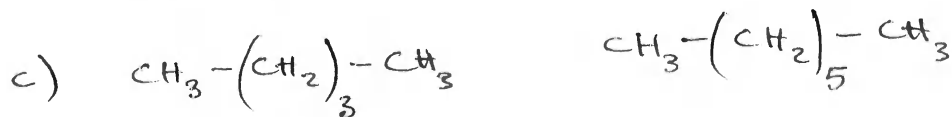
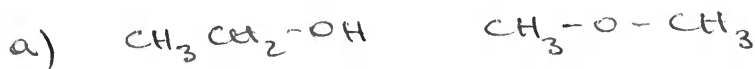


R: Aromatiche a, c, d

- 16) Completare la seguente serie di reazioni sostituendo alle lettere i reagenti o i prodotti opportuni:



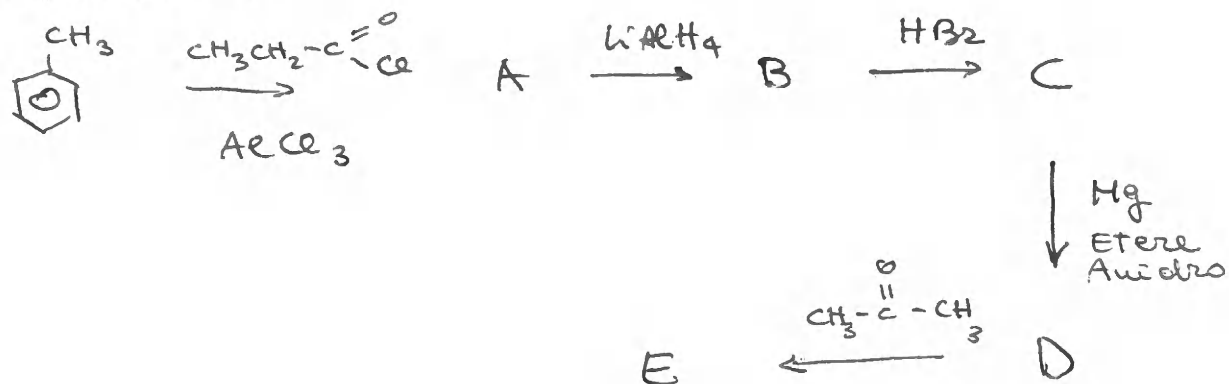
- 17) Indicare qual è il composto, in ciascuna delle seguenti coppie, che ha il punto di ebollizione più alto:



e) *no*

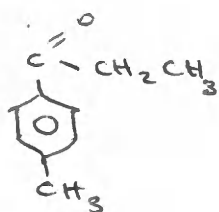
f) $\text{CH}_3-\text{CH}_2-\text{COOH}$

- 18) Si sostituiscono alle lettere i prodotti opportuni.
Per A, considerare un solo numero di struttura.

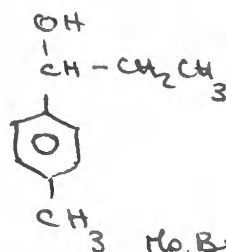


R:

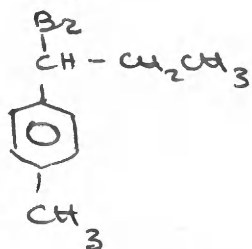
A =



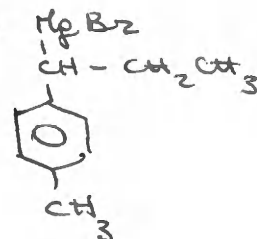
B =



C =



D =



E =

