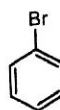
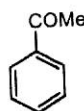
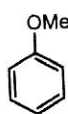
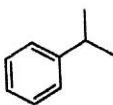


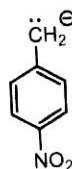
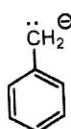
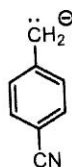
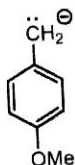
ESERCIZI

5.1

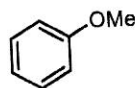
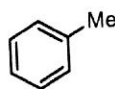
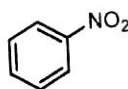
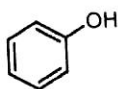
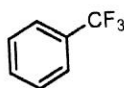
Ordinare secondo reattività vs $\text{Br}_2/\text{AlBr}_3$ i seguenti composti:

5.2

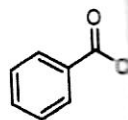
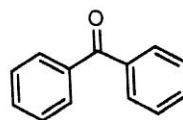
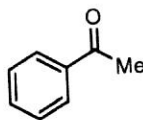
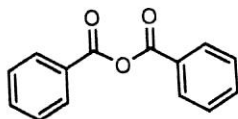
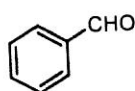
Ordinare secondo stabilità i seguenti carbanioni benilici:



5.3

Ordinare secondo la reattività vs Br^+ i seguenti composti:

5.4

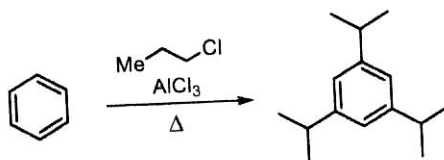
Ordinare secondo la reattività vs MeNH_2 i seguenti composti e scrivere i prodotti di reazione:

5.5

Sintetizzare l'acido 2-cloro-4-nitrobenzoico da benzene.

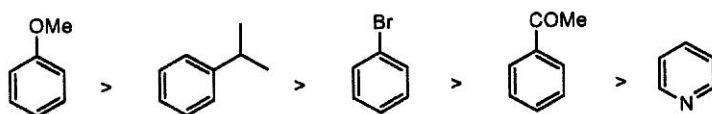
5.6

Scrivere il meccanismo della seguente reazione:



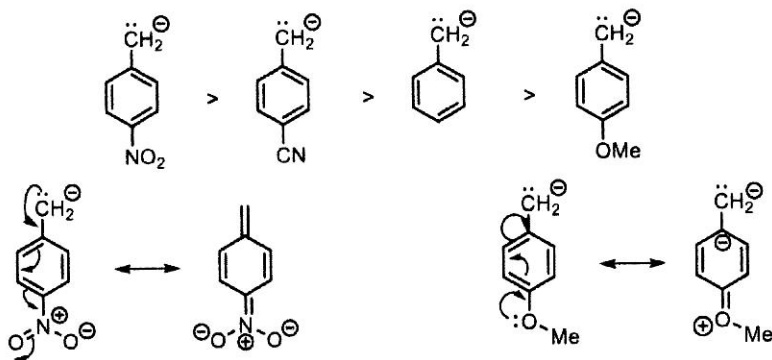
SOLUZIONI

5.1

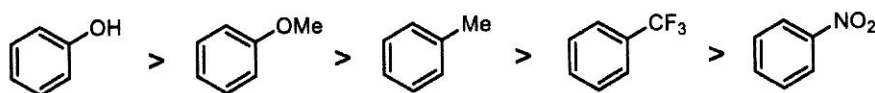


5.2

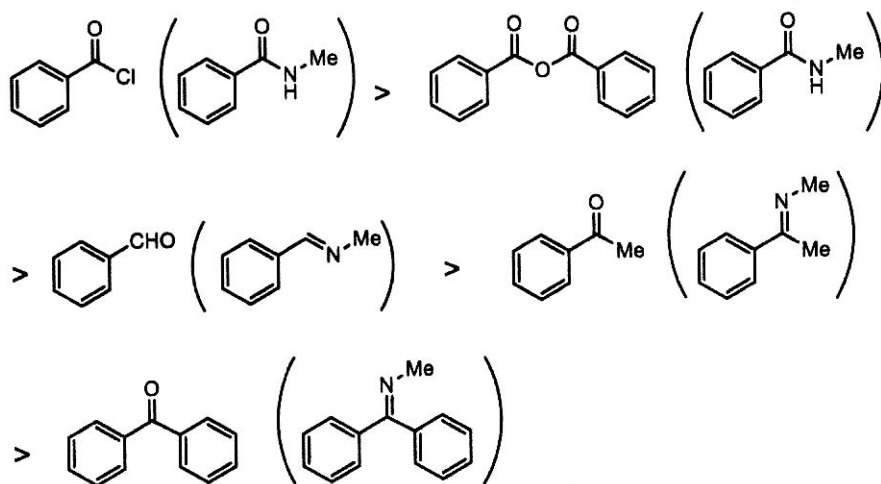
L'anione *p*-nitrobenzile è stabilizzato dall'effetto $-M$ del gruppo NO_2 . L'anione *p*-metossibenile è destabilizzato dall'effetto $+M$ dell'ossigeno.



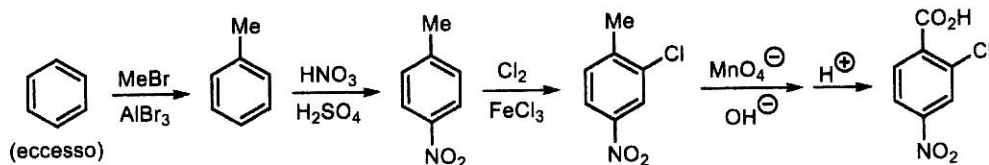
5.3



5.4



5.5



5.6

In condizioni di controllo termodinamico (alta T , tempi lunghi di reazione) si forma l'isomero 1,3,5-trisostituito più stabile in quanto viene minimizzata l'interazione sterica tra i tre gruppi isopropilici. Sotto controllo cinetico (bassa T , tempi brevi di reazione) verrebbe favorito l'isomero 1,2,4-trisostituito.

