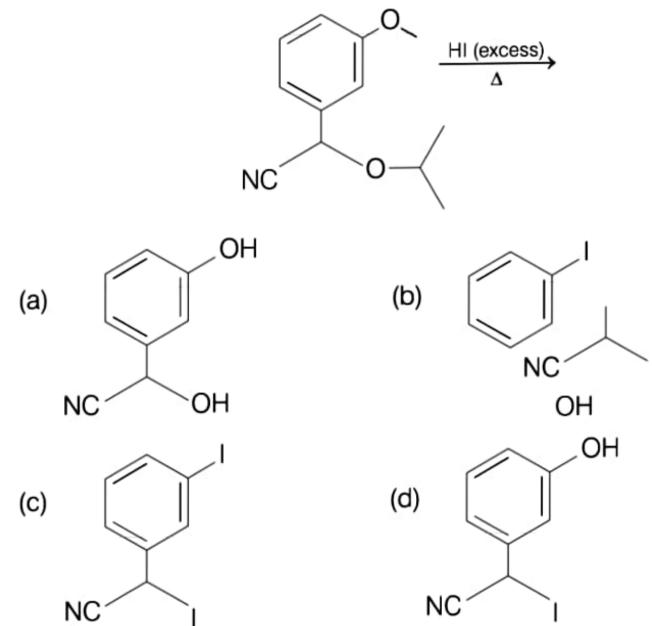
The major product of the following reaction is (2019 Main, 10 April I)



1. The given reaction takes place as follows:

Cleavage-I

H (excess)

H Cleavage-II

Cleavage-II

Cleavage-II

Cleavage-II

S_N1 pathway
[via cleavage I]

OH

+
$$\dot{C}H$$

CH₃OH

+ $\dot{C}H$

NC

OH

CH₃ CH₃

Product-1

Product-2

Product-2 is formed because

- (i) Cleavage-I will give more stable aryl carbocation.
- (ii) Cleavage- I will give intermediate which is in conjugation with ring.