

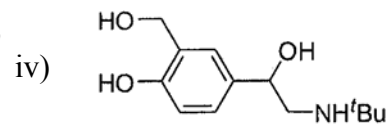
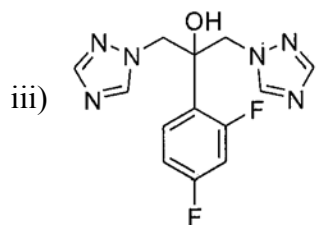
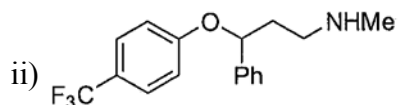
[4]

UNIT : 4092-O

4. a) Suggest a logical **retro-synthetic analysis** and **synthetic pathway** for the following compounds.

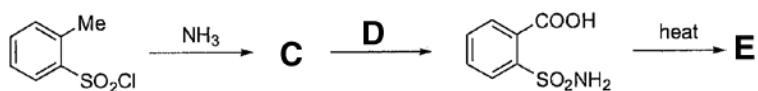
(any two)

2×2

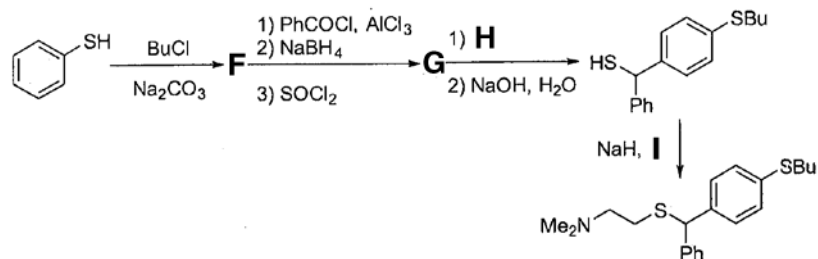


- b) Complete the following reactions. Write proper reagents and/or structure of the compounds (C–I) (A–G) in following synthetic schemes. 2×2

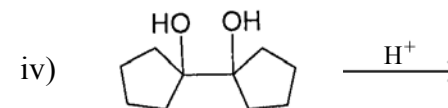
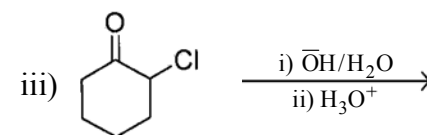
i)



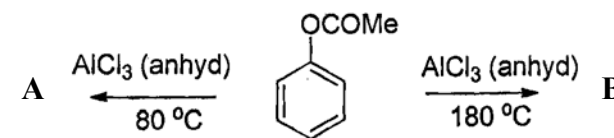
ii)



[3]

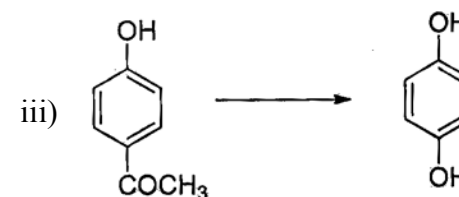
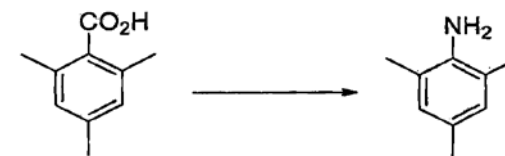


- b) i) Write down the structures of the products A and B. 2



Provide an explanation with mechanism for the formation of above said products under different reaction conditions.

- ii) Mention the reagents for the following transformation. 1+1



[Turn over