FRO-II, POW - N° 3

1 Propose a synthetic route to **selectively** prepare compound **A**. Anisole (methoxybenzene) is the allowed aromatic starting material. Hint: The synthesis requires more than one step.

Which one of the two substrates **B** or **C** reacts faster?

Why does it react faster?

$$\begin{array}{c|c} & & Br_2, AlBr_3 \\ \hline & CCl_4 \end{array} \qquad \begin{array}{c} \\ \\ \\ R \end{array} \qquad Br$$

B: R=OMe **C**: R=CO₂Me

3 1,4-dimethoxybenzene is reacted under Vilsmeier-Haack conditions. Please draw a detailed mechanism of the reaction and as well the product.