

## Assignment 1

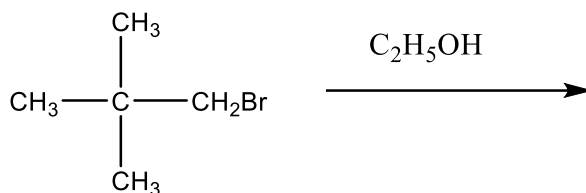
### Chemistry (Generic)

2<sup>nd</sup> SEM

1. Why alkyl halides are insoluble in water although they contain C-X bond. (2)
2. Arrange the following in order of their increasing reactivity towards nucleophilic substitution reactions. (1)

**CH<sub>3</sub>F, CH<sub>3</sub>Cl, CH<sub>3</sub>I, CH<sub>3</sub>Br**

3. Explain S<sub>N</sub>i mechanism with an example. (3)
4. Write the principal product of the following reaction with mechanism. (3)



5. Explain the stereochemistry in S<sub>N</sub>1, S<sub>N</sub>2 and S<sub>N</sub>i mechanism. (6)