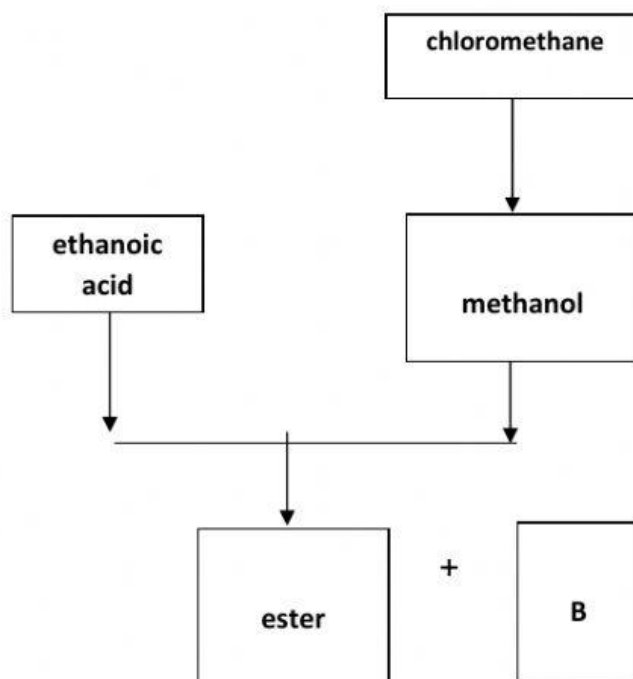


QUESTION 8

Consider the following flow-diagram of a chemical process that leads to the formation of an ester.



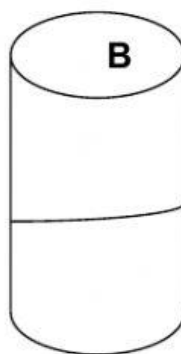
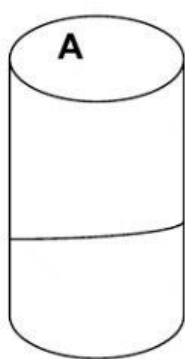
- 8.1 Write down the NAME of compound B (1)
- 8.2 Give the IUPAC name of the ester formed. (1)
- 8.3 Name the type of reaction which chloromethane is turned into methanol. First write addition, elimination or substitution and then the specific type. (1)
- 8.4 There are 2 possible pathways to form the methanol mentioned in 8.3. Write the **name** of both reactants you could add to form methanol. (2)

[5]

QUESTION 9

A class is provided with samples of pentane (A) and pent-1- ene (B) in two separate test tubes as shown below.

She wishes to distinguish between these 2 compounds in the laboratory.



9.1 State the name of the substance you will need to add to test which compound is pentane (A) or pent-1- ene (1)

9.2 State the IUPAC name of the compound that will change colour first. (1)
[2]

Total 58