Practice Question Set For A-Level
**Subject : Chemistry**
**Paper-2 Topic: Introduction To Organic Chemistry**

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**Name of the Student**:_____
**Max. Marks : 15 Marks** **Time : 15 Minutes**

Mark Schemes

Q1.

(a) Reaction 2: NaOH OR KOH **(1)** M1 alcohol (ic) OR ethanol (ic)**(1)** M2

*ignore heat*

*Condition mark linked to correct reagent but award M2 if $OH^-$ or base or alkali mentioned*

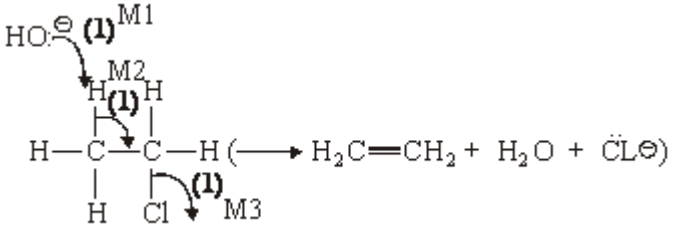
Reaction 3: concentrated $H_2SO_4$ OR $H_3PO_4$ M1 **(1)** heat **(1)** M2
OR 150°C - 200°C

*Condition mark linked to correct reagent but award M2 if $H_2SO_4$ or $H_3PO_4$, but not concentrated*

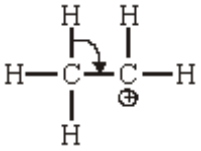
*Penalise reagent and condition if dilute $H_2SO_4$ / $H_3PO_4$*

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(b) Mechanism:




*Award M3*  *independently*
*M1 and M2 must be to / from correct places*



*E1 mechanism possible in which M2*

Name: of mechanism = elimination **(1)**

*NOT dehydrohalogenation*

*Ignore "base" OR "nucleophilic" before elimination*

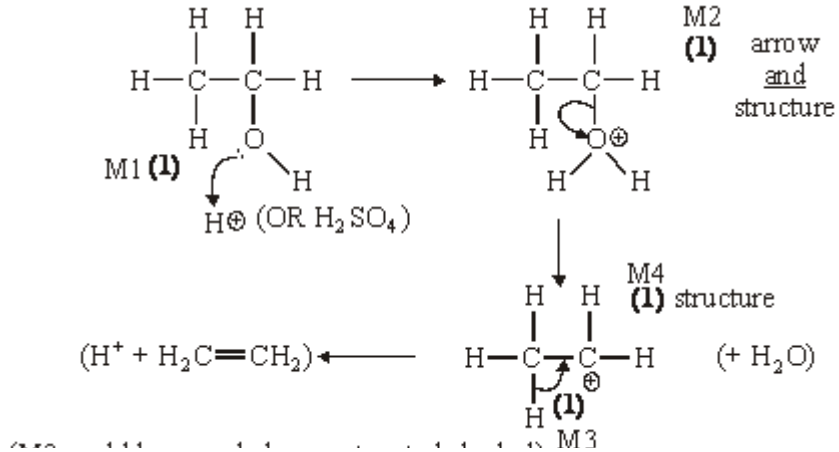
Reason: Reaction 2 has (very) low yield **(1)**

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*QoL OR chloroethane has to be made (from ethane)*
*OR chloroethane is expensive*
*OR chloroethane is not redily available*

(c) Mechanism:

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Name of mechanism = elimination **(1)**

*NOT dehydration alone*

Reason: Ethanol could come from (fermentation of) renewable

*QoL sugars / glucose / carbohydrates / sources* ***(1)***

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**[15]**

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