

# 13. An introduction to AS Level organic chemistry

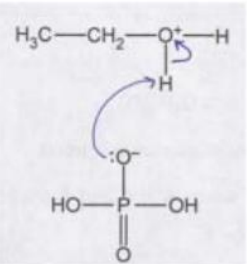
## 13.2 Characteristic organic reactions

### Paper 2

#### Marking Scheme

## Q1.

(c)(i)	acid <b>AND</b> it donates a proton / $H^+$	1
(c)(ii)	$(CH_3CH_2)^+$ OR $CH_3C^+H_2$ <b>AND</b> accepts a pair of electrons	1

(c)(iii)	 <p><b>M1</b> arrow from bond of one of the O-H to O of the cation <b>M2</b> arrow from lone pair on O of the anion to between H of H-O</p>	2
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## Q2.

(b)(i)	ultraviolet light / uv	1
(b)(ii)	homolytic fission (of chlorine (gas) / $Cl_2$ )	1

## Q3.

(a)	hydrolysis	1
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## Q4.

(d)(i)	unpaired electron(s)	1
(d)(ii)	homolytic (fission)	1
	one electron goes to each chlorine / atom OR pair of electrons is shared out (equally between the two atoms)	1