

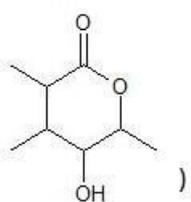


Mark Scheme

Q1.

Question Number	Answer	Mark
	<p>The only correct answer is C ()</p> <p><i>A is not correct because there are two ketone groups but no aldehyde group</i></p> <p><i>B is not correct because there are two ketone groups but no aldehyde group</i></p> <p><i>D is not correct because there are two aldehyde groups but no ketone group</i></p>	(1)

Q2.

Question Number	Answer	Mark
	<p>The only correct answer is D ()</p> <p><i>A is not correct because there is a ketone group present</i></p> <p><i>B is not correct because there is a ketone group present</i></p> <p><i>C is not correct because there is a ketone group present</i></p>	(1)

Q3.

Question number	Answer	Mark
(i)	<p>The only correct answer is B (Compound Q)</p> <p><i>A is incorrect because this is not hydrolysed</i></p> <p><i>C is incorrect because this is hydrolysed to form phenol and ethanoic acid</i></p> <p><i>D is incorrect because this is not hydrolysed</i></p>	(1)



Question number	Answer	Mark
(ii)	<p>The only correct answer is A (Compound P)</p> <p><i>B is incorrect because it is an ester and does not react with sodium hydrogencarbonate</i></p> <p><i>C is incorrect because it is an ester and does not react with sodium hydrogencarbonate</i></p> <p><i>D is incorrect because it is not acidic enough to react with sodium hydrogencarbonate</i></p>	(1)

Q4.

Question Number	Answer	Mark
	<p>The only correct answer is A (LiAlH₄ and ether)</p> <p><i>B is incorrect as acidified KMnO₄ is an oxidising agent</i></p> <p><i>C is incorrect as Sn/HCl is too mild a reducing agent</i></p> <p><i>D is incorrect as acidified Na₂Cr₂O₇ is an oxidising agent</i></p>	(1)

Q5.

Question Number	Answer	Mark
	<p>The only correct answer is B ($\left[-\text{O}-(\text{CH}_2)_2-\text{O}-\overset{\text{O}}{\parallel}{\text{C}}-(\text{CH}_2)_2-\overset{\text{O}}{\parallel}{\text{C}}- \right]_n$)</p> <p><i>A is not correct because there is an additional oxygen atom in the repeat unit</i></p> <p><i>C is not correct because there is an incorrect number of CH₂ groups in one of the monomers and there is an additional oxygen atom in the repeat unit</i></p> <p><i>D is not correct because there is an incorrect number of CH₂ groups in one of the monomers</i></p>	(1)