

## 38th INTERNATIONAL CHEMISTRY OLYMPIAD

## UK Round One - 2006

## MARKING SCHEME

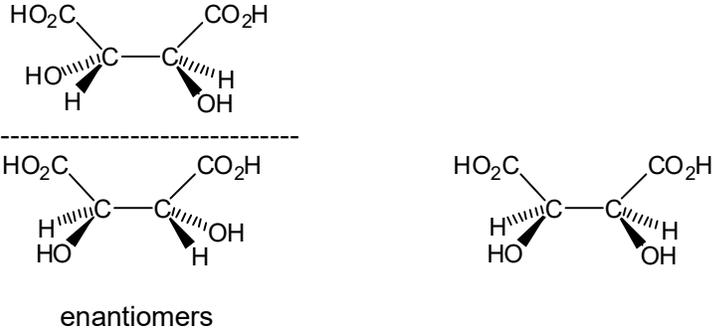
## Notes

Chemical equations may be given as sensible multiples of those given here.

State symbols do not need to be included in the chemical equations to obtain the mark(s).

Answers should be given to an appropriate number of significant figures although the marker should only penalise this once.

Total 78 marks.

Question 1		Answer	Marks
(a)		$C_{12}H_{22}O_{11} + 12O_2 \longrightarrow 12CO_2 + 11H_2O$	1
(b)		Allow 110 kJ or 111kJ (rounded to 3 sig fig)	1
(c)		95 sweets [Allow ecf from (b)]	1
(d)		Mass of sodium hydrogencarbonate = 0.0210g Mass of tartaric acid = 0.0188g	1 1
(e)		<p>2 marks for all 3 structures shown correctly. 1 further mark for enantiomers correctly identified.</p>  <p>enantiomers</p>	3
(f)		None	1

9 marks