

# WATER 2

## MARK SCHEME

Q1.

Question	Answers	Extra information	Mark
	use of (water) filters / ion exchange containing carbon / charcoal / silver / resins		1
		ignore other substances	1
	any two from: • carbon / charcoal removes chlorine • carbon / charcoal removes soluble / dissolved substances • silver kills / prevents growth of microorganisms • ion exchange removes calcium ions / magnesium ions / metal ions • ion exchange replaces (metal ions) with H+ / Na+ • ion exchange removes hardness		2
		allow exchange for replace	
Total			4

**Q2.**

Question	Answers	Extra information	Mark
	any three from: <ul style="list-style-type: none"> <li>• heat / sun / energy</li> <li>• (water) evaporates</li> <li>• (water) vapour rises</li> <li>• vapour cools</li> <li>• condenses</li> <li>• droplets of water form or clouds form</li> <li>• rain / snow / hail / sleet / 'precipitation'</li> </ul>		3
Total			3

**Q3.**

Question	Answers	Extra information	Mark
	filter  to remove solids or insoluble particles  <b>OR</b>  add coagulant (1) flocculation / settling / remove solids (1)		1
	(add) chlorine	accept ozone / UV	1
	to reduce the number of microbes	accept to kill microbes / bacteria / germs accept sterilise allow disinfect ignore remove microbes	1
Total			4

**Q4.**

Question	Answers	Extra information	Mark
(a)(i)	Solids		1
(ii)	Chlorine		1
(iii)	kill microbes/bacteria	allow to make the water safe to drink ignore disinfect ignore remove / get rid of microbes	1
(b)	energy	allow heat	1
Total			4