

Question	Marking guidance	Mark	Comments
01.1	1. Cellulose is made up of $\beta$ -glucose (monomers) <b>and</b> glycogen is made up of $\alpha$ -glucose (monomers); 2. Cellulose molecule has straight chain <b>and</b> glycogen is branched; 3. Cellulose molecule has straight chain <b>and</b> glycogen is coiled; 4. glycogen has 1,4- and 1,6- glycosidic bonds <b>and</b> cellulose has only 1,4- glycosidic bonds;	2 max	Ignore ref. to H bonds / microfibrils
01.2	Any <b>two</b> from: 1. Insoluble (in water), so doesn't affect water potential; 2. Branched / coiled / ( $\alpha$ -)helix, so makes molecule compact; OR Branched / coiled / ( $\alpha$ -)helix so can fit many (molecules) in small area; 3. Polymer of ( $\alpha$ -)glucose so provides glucose for respiration; 4. Branched / more ends for fast breakdown / enzyme action; 5. Large (molecule), so can't cross the cell membrane	2 max	Require feature <b>and</b> explanation for 1 mark 1. Accept $\Psi$ or WP 1. Accept Insoluble so doesn't affect osmosis  1. Do <b>not</b> allow ref to 'doesn't affect water leaving cells'  4. Ignore 'surface area' 4. Accept 'branched so glucose readily released'
01.3	Iodine/potassium iodide;	1	Auto mark
01.4	For correct answer of 40 ( $\mu$ m) award 2 marks;; Evidence of division by 500: award 1 mark	2	Allow tolerance of 0.5mm ie $20 \pm 0.5$ mm
01.5	1. Scanning electron (microscope); 2. 3D (image);	2	Accept SE(M) 2. Ignore any other correct features