Mark schemes

Q1.

(a) 1. Buffers changes in temperature;

Accept descriptions of buffering changes in temperature, eg resists temperature changes

2. (Provides a) cooling effect (via evaporation);

2

(b) 1. Evaporation/transpiration (from the porous pot);

2. Tension created moves water (upwards);

Accept 'negative pressure' for tension or 'water pulled' or 'suction'.

Ignore adhesion but reject mark point 3 if adhesion used to describe attraction between water molecules.

3. Cohesion maintains the column of water

OR

Cohesion is due to hydrogen bonds between water (molecules);

3

(c) 0.8/0.85/0.848/0.8478 (using 3.14);

OR

0.8482 (using π on calculator)

1

[6]