

Question number	Answer	Notes	Marks
2 (a)	potometer;		1
(b)	transpirati / evaporation / diffusion;		1
(c)	1 cut under water; 2 water tight / air tight / seal / eq; 3 <u>how</u> bubble introduced; 4 dry leaves / eq; 5 measure distance bubble moves / length of bubble eq; 6 scale / ruler / cm / eq; 7 time / second / minute / hour / day; 8 repeat;		Max 4
(d) (i)	blows water away / removes water / eq; (maintains) diffusion <u>gradient</u> / conc. <u>gradient</u> / eq;	ignore guard cells	2
(ii)	stomata close / pores close;		1
(iii)	less surface / area; (fewer) idea of reduced number of stomata / pores;		2
(e)	fan / hairdryer / outdoors / put in a draught / put in open window / eq;		1
		Total	12

Question number	Answer	Notes	Marks
4 (a) (i)	trachea / wind pipe / cartilage; alveoli / alveolus / air sacs;	reject air pockets	2
(b) (i)	X – oxygen / O ₂ ; Y - carbon dioxide / CO ₂ ;		2
(ii)	8.4;		1
(iii)	B diffusion;		1
		Total	6

Question number	Answer	Marks
1 (a)	aorta; pulmonary artery;	2
(b)	easier to change / replace / recharge / leakage / eq; ignore electric shock	1
(c)	(more) oxygen / oxygenated; (less) carbon dioxide; high(er) pressure; ignore colour	2
(d)	oxygen / glucose; respiration / energy / eq; <u>muscles</u> ;	Max 2
(e)	shortage of hearts available / unwilling / few donors / eq; no tissue match / compatability / rejection / wrong blood group / eq; ignore cost / health / age issues	1
(f)	<u>in</u> ventricle; ignore between	1
(g)	small / eq; silent / quiet / less noise / eq; permanent / no need to replace / eq; light / eq;	Max 2

Total 11 Marks