Question number	Answer	Notes	Marks
1 (a)	leaf;		1
(b)	made from tissue(s) + perform a specific function / eq;		1
(c)	The following named and labelled correctly: cell wall; cell membrane; 5 to 6 correct = 3 nucleus; chloroplast; 3 to 4 correct = 2 cytoplasm; vacuole; 1 to 2 correct = 1	ignore mitochondria and ribosomes	3

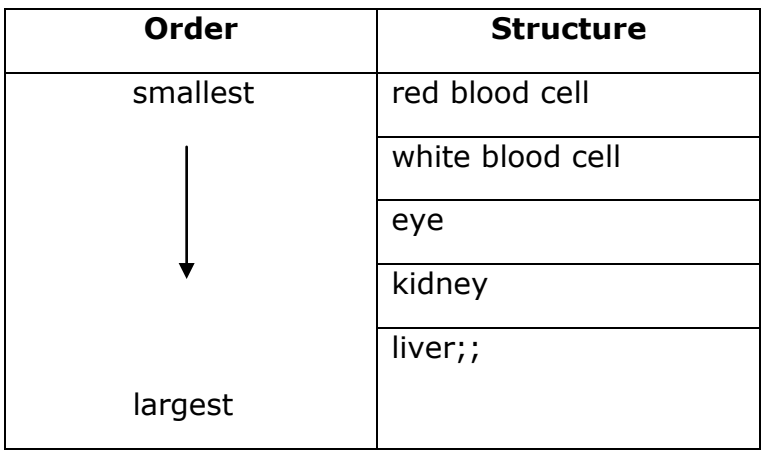
Question number	Answer	Notes	Marks
2(a)(i)	tissue(s) that carry out (same) function / <u>different</u> cell types that carry out (same) function / eq;		1
(ii)	heart;		1
(iii)	1. n vous / CNS; 2. br thing / respiratory / ventilation; 3. d estive; 4. cretory / urinary; 5. keletal; 6. en crine / hormonal;		3 max
(iv)	reproductive / immune / lymphatic;		1

(b)	<table><tr><th>Process</th><th>Name of organ</th></tr><tr><td>ultrafiltration</td><td>kidney;</td></tr><tr><td>ventilation</td><td>lung;</td></tr><tr><td>secretion of insulin</td><td>pancreas;</td></tr><tr><td>secretion of hydrochloric acid</td><td>stomach;</td></tr><tr><td>bile production</td><td>liver;</td></tr></table>		5

Total 11 marks

Question number	Answer	Notes	Marks
3 (a)			4

	Level		
Example	**organelle**	**organ**	**system**
nucleus	(✓)		
circulation			✓;
chloroplast	✓;		
leaf		✓;	
bulb		✓;	

Question number	Answer	Notes	Marks
3 (b)		5 = 2 marks 3 = 1 mark	2

(Total for Question = 6 marks)

<table>
<tr><th>Question number</th><th>Answer</th><th>Notes</th><th>Marks</th></tr>
<tr><td>4 (a)</td><td>
<table>
<tr><th>Illness</th><th>Organ needed to cure illness</th></tr>
<tr><td>uremia</td><td>(kidney)</td></tr>
<tr><td>emphysema</td><td>lung(s)</td></tr>
<tr><td>coronary failure</td><td>heart;</td></tr>
<tr><td>diabetes</td><td>s;</td></tr>
<tr><td>hepatitis</td><td>liver;</td></tr>
<tr><td>poor vision</td><td>cornea(s);</td></tr>
</table>
</td><td></td><td>5</td></tr>
<tr><td>(b)</td><td>b le;
emulsifies / large drops to small drops / eq;
neutralise / optimum pH / alkaline;</td><td></td><td>2</td></tr>
<tr><td>(c) (i)</td><td>genetically / gene / allele / DNA;
identical / same / eq;</td><td>ignore similar</td><td>2</td></tr>
<tr><td>(ii)</td><td>lots / no shortage / no delay / better supply / always available / eq;

no rejection / match / accepted by body / eq;

no problems with relatives / eq;</td><td>allow ref to blood type</td><td>2</td></tr>
</table>

TOTAL 11 MARKS

Question number	Answer	Notes	Marks
5(a)(i)	1. up r epidermis; 2. tr sparent / lets light through / no chloroplasts;	waxy cuticle is transparent = 1	2
(ii)	1. p isade; 2. d sely packed / aligned vertically / eq; 3. i a of many / lots of chloroplasts; 4. sorb / take in / trap light;	ignore lots of chlorophyll	3 max
(iii)	1. ongy; 2. a spaces; 3. ffusion / movement of gases / gas exchange / eq; 4. xylem vascular bundle; 5. tr sport water;	Ignore phloem	3 max
(iv)	1. gua cell; 2. op / close; 3. let in carbon dioxide / water loss / transpire / evaporate / eq;	Ignore stomata Ignore gas exchange	2 max
(b)	1. lo r surface in water / upper surface exposed to air; 2. allows carbo dioxide in; 3. allows transpiration / evaporatio / water loss / eq;	Ignore gas exchange Allow converse for Mps 2 and 3	2 max
(c)(i)	20;		1
(ii)	fewer/no stomata / holes / pores / guard cells;		1

Total 14 marks