

Question	Answer	Marks	AO Element	Notes	Guidance
1	semilunar <u>valve</u> ; prevents backflow of blood (correctly described) / ensures that blood flows in one direction ;	2			
2	listen, (to the sound of) part Z / valve, closing ;	1			
3	70 (beats per minute) ;	1			
4	binds to / releases / transports / AW, oxygen ;	1			
5	<i>any three from:</i> <i>ref. to platelets ;</i> fibrinogen converted to fibrin ; soluble to insoluble ; forms a mesh ; traps, (red blood) cells ;	3			
6	<i>any two from:</i> heart has, two / left and right, sides / AW ; blood must flow through the heart twice in one (complete) circuit / AW (of the body) ; pulmonary and systemic circuits / circuits from heart to lungs and from heart to rest of body ;	2			

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7	alveoli ; two(-way) ;	2			
8(a)	9900 (%) ;;	2			
8(b)	concentration of salts is the same in the blood in the renal artery and the fluid in the kidney tubule ; concentration of salts, increases between the blood in the renal artery and the fluid in the kidney tubule and the urine / (approximately) doubles ;	2			
8(c)	proteins are (too) big (to be filtered) / AW ;	1			
8(d)	(all) glucose is reabsorbed ;	1			
9	<i>any one from:</i> one loop to lungs / pulmonary circulation, and one loop to rest of the body / systemic circulation ; blood flows through heart twice, for one (complete) circuit / to get back to the same point ;	1			

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10	arrow to point from heart to lungs ;	1			
[Total: 20]					