Mark scheme - Transport in Animals - MCQ

Question			Answer/Indicative content	Marks	Guidance
1			B ✓	1	
			Total	**1**	
2			A ✓	1	
			Total	**1**	
3			D ✓	1	
			Total	**1**	
4			B ✓	1	
			Total	**1**	
5			C ✓	1	
			Total	**1**	
6			B	1	
			Total	**1**	
7			A ✓	1	
			Total	**1**	
8			C ✓	**1**	**Examiner's Comments** Option **A** provided a distractor and common incorrect response to the correct option **C** in this question, as statement 1 relating to the cells synthesising ecdysone, would not form part of an explanation for the site of action of the hormone.
			Total	**1**	
9			B ✓	1	
			Total	**1**	
10			**C** ✓	1	**Examiner's Comments** The correct answer, C, was selected by many candidates. Many candidates seemed to have difficulty in matching their familiar vertical section of a heart to the cross section even

					though the bicuspid and tricuspid valves should have been easy to recognise.
			Total	**1**	
11			A ✓	1 (AO2.6)	
			Total	**1**	
12			C	1 (AO2.2)	
			Total	**1**	
13			B	1 (AO2.8)	
			Total	**1**	
14			B	1 (AO2.6)	
			Total	**1**	
15			**D** ✓	1	**Examiner's Comments** This question tests understanding of the Bohr effect. Candidates find this a difficult topic and many link more hydrogen ions to higher pH. Those that understand the pH scale then incorrectly link a fall in pH to a rise in affinity of haemoglobin for oxygen. Only the most able candidates reliably got this correct.
			Total	**1**	
16			**B** ✓	1	**Examiner's Comments** Candidates should be well aware that insects have a single open circulatory system. *Daphnia* are small crustaceans closely related to insects. Most candidates were able to spot this link and give the correct response.
			Total	**1**	
17			**A ✓**	**1**	**Examiner's Comments** This was well answered. It was, however, surprising the number of candidates who

					thought that the vessel described was a capillary.
			Total	**1**	
18			**A ✓**	**1**	**ACCEPT B** **Examiner's Comments** Candidates could reasonably suggest either **A** or **B** as correct answers and both were credited in order to be fair to candidates.
			Total	**1**	
19			**C ✓**	**1**	**Examiner's Comments** This was answered quite well. Option **B** was a common incorrect suggestion.
			Total	**1**	
20			D	1	
			Total	**1**	
21			A	1	
			Total	**1**	
22			B	1	
			Total	**1**	
23			D	1	
			Total	**1**	