Mark scheme - Nucleotides and Nucleic Acids - MCQ

Question			Answer/Indicative content	Marks	Guidance
1			A	1	
			Total	**1**	
2			C ✓	1	
			Total	**1**	
3			D	1	
			Total	**1**	
4			D	1	
			Total	**1**	
5			B	1	
			Total	**1**	
6			A ✓	1	
			Total	**1**	
7			C ⎫	1	**ALLOW** A **Examiner's Comments** Almost all candidates achieved this mark.
			Total	**1**	
8			B ✓	1	
			Total	**1**	
9			D ✓	1	**ALLOW** A **Examiner's Comments** Due to the action of DNA polymerase, option D provided the correct response for this question. As the two strands of DNA separate during replication the distance between the strands is **not** always the same (option B). Option A was not on the specification but it was decided to credit candidates who had opted for this response based on the function of RNA primers during replication of DNA.
			Total	**1**	

10			**D** ✓	1	**Examiner's Comments** D, the correct response was selected by many candidates. A number of candidates selected A, thinking about the bond between two consecutive nucleotides in a single chain.
			Total	1	
11			A ✓	1 (AO2.1)	**Examiner's Comments** Many candidates didn't identify the correct answer (A)and the incorrect letters were evenly distributed. However, a basic knowledge of DNA and RNA structure ought to have allowed candidates to quickly discount B and D as being DNA rather than RNA.
			Total	0	
12			B	1 (AO2.6)	
			Total	1	
13			C ✓	1 AO 2.5	
			Total	1	
14			**B** ✓	1	**Examiner's Comments** This question was challenging. Those who answered incorrectly predominantly suggested **A.**
			Total	1	
15			**C** ✓	1	**Examiner's Comments** **D** was a common incorrect answer provided by a significant proportion of candidates.
			Total	1	
16			**A** ✓	1	**Examiner's Comments** This was the most challenging question for candidates, with the fewest number of correct answers. There was no pattern in the incorrect answers supplied.

			Total	**1**	
17			**A ✓**	**1**	**Examiner's Comments** Most candidates answered this correctly. The most common incorrect answer was not, as anticipated, the distractor **C** but **D**.
			Total	**1**	
18			B	1	
			Total	**1**	
19			A	1	
			Total	**1**	