

## Mark scheme - Nucleotides and Nucleic Acids - MCQ

Question	Answer/Indicative content	Marks	Guidance
1	A	1	
	<b>Total</b>	<b>1</b>	
2	C ✓	1	
	<b>Total</b>	<b>1</b>	
3	D	1	
	<b>Total</b>	<b>1</b>	
4	D	1	
	<b>Total</b>	<b>1</b>	
5	B	1	
	<b>Total</b>	<b>1</b>	
6	A ✓	1	
	<b>Total</b>	<b>1</b>	
7	C ✓	1	<b>ALLOW A</b> <b>Examiner's Comments</b> Almost all candidates achieved this mark.
	<b>Total</b>	<b>1</b>	
8	B ✓	1	
	<b>Total</b>	<b>1</b>	
9	D ✓	1	<b>ALLOW A</b> <b>Examiner's Comments</b> 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 <b>not</b> 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.
	<b>Total</b>	<b>1</b>	

Nucleotides and Nucleic Acids

10			D ✓	1	<b>Examiner's Comments</b> 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.
			<b>Total</b>	<b>1</b>	
11			A ✓	1 (AO2.1)	<b>Examiner's Comments</b> 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.
			<b>Total</b>	<b>0</b>	
12			B	1 (AO2.6)	
			<b>Total</b>	<b>1</b>	
13			C ✓	1 AO 2.5	
			<b>Total</b>	<b>1</b>	
14			B ✓	1	<b>Examiner's Comments</b> This question was challenging. Those who answered incorrectly predominantly suggested A.
			<b>Total</b>	<b>1</b>	
15			C ✓	1	<b>Examiner's Comments</b> D was a common incorrect answer provided by a significant proportion of candidates.
			<b>Total</b>	<b>1</b>	
16			A ✓	1	<b>Examiner's Comments</b> This was the most challenging question for candidates, with the fewest number of correct answers. There was no pattern in the incorrect answers supplied.

## Nucleotides and Nucleic Acids

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