1. The statements below relate to the epigenetic regulation of gene expression.

Which of the following statements is/are correct?

1 Methylation of DNA prevents gene transcription.

2 The most common base to undergo methylation is guanine.

3 Acetylation of histone proteins causes DNA to become less accessible to transcription factors.

A 1, 2 and 3 are correct

B Only 1 and 2 are correct

C Only 2 and 3 are correct

D Only 1 is correct

Your answer ☐ [1]

2. Which of the statements, **A** to **D**, is true of epigenetics?

A Guanine is the most commonly methylated DNA base.

B Identical twins show identical epigenetics.

C Proteins cannot undergo epigenetic modification.

D Some epigenetic changes can be reversed.

Your answer ☐ [1]

END OF QUESTION PAPER

Mark Scheme

Question			Answer/Indicative content	Marks	Guidance
1			D ✓	1	Examiner's Comments This question was more demanding as candidates had to identify which of three statements were correct. Encouragingly more than 50% of candidates chose the correct option on this challenging area of biology.
			Total	1	
2			D	1	Examiner's Comments Only the more able candidates were able to select D as the correct response.
			Total	1	