ONTARIO BIOLOGY, GRADE 12, UNIVERSITY PREPARATION (SBI4U) · UNIT C · 5 QUESTIONS

Molecular Genetics — Practice Test

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **Colourful DNA double helix model on a laboratory bench. The template strand of DNA is read during transcription in which direction**



A Neither direction

B Both directions at once

C Three prime to five prime

D Five prime to three prime

Understand It with Pulse | Flag a mistake

2 **RNA polymerase adds nucleotides to a growing RNA strand in which direction**

A Three prime to five prime

B Five prime to three prime

C Opposite to the template only

D Random direction

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3 **Which base replaces thymine in RNA**

A Adenine

B Cytosine

C Guanine

D Uracil

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4 **A gene is best defined as a DNA sequence that**

- A Is always expressed
- B Never mutates
- C Contains only exons
- D Codes for a functional product

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5 **Operons in bacteria allow coordinated control of**

- A Groups of related genes
- B Chromosome number
- C Protein folding
- D Single genes only

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ANSWER KEY

1. C
2. B
3. D
4. D
5. A

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