ONTARIO BIOLOGY, GRADE 12, UNIVERSITY PREPARATION (SBI4U) · UNIT A · 10 QUESTIONS

Biochemistry — 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 **RNA differs from DNA in that RNA usually is**



A Single stranded with uracil

B Double stranded with uracil

C Single stranded with thymine

D Double stranded with thymine

Understand It with Pulse | Flag a mistake

2 **Which lipid is a major component of animal cell membranes and also a precursor of steroid hormones**



A Cellulose

B Cholesterol

C Starch

D Glycogen

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3 **Competitive inhibition of an enzyme occurs when an inhibitor**

A Changes the cell pH permanently

B Denatures the substrate

C Removes the enzyme from the cell

D Binds to the active site

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4 **Increasing substrate concentration at first increases reaction rate because**

A More active sites are occupied

B The enzyme is denatured

C Products inhibit the enzyme

D The pH rises sharply

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5 **A DNA sample contains 18 percent cytosine. The percentage of thymine in the sample is**

- A 18 percent
- B 32 percent
- C 36 percent
- D 64 percent

Understand It with Pulse | Flag a mistake

6 **Which process breaks a peptide bond by adding water**

- A Hydrolysis
- B Phosphorylation
- C Condensation
- D Denaturation

Understand It with Pulse | Flag a mistake

7 **Saturated fats tend to be solid at room temperature because their chains**

A Contain many hydroxyl groups

B Dissolve easily in water

C Are kinked by double bonds

D Pack closely together

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8 **The quaternary structure of haemoglobin involves**

A Four polypeptide chains together

B A single alpha helix

C One polypeptide chain only

D A DNA double helix

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9 **Which molecule carries amino acids to the ribosome during translation**

A Genomic DNA

B Transfer RNA

C Ribosomal DNA

D Messenger RNA

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10 **In DNA replication, the leading strand is synthesized**

A In fragments only

B Away from the fork

C Continuously toward the fork

D Without a primer

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. A
2. B
3. D
4. A
5. B
6. A
7. D
8. A
9. B
10. C

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