Advanced High School Biology

Advanced Biology · Answer Key · 2 Questions

1. Which structure triggers Rho-independent transcription termination in prokaryotes?

A) A GC-rich hairpin loop followed by a poly-U tract in the mRNA

B) A phosphorylation signal on the C-terminal domain of RNA polymerase II

C) A polyadenylation signal sequence (AAUAAA) recognized by endonucleases

D) A stem-loop structure bound by a single-stranded DNA binding protein

2. Which primary enzyme carries out initial carbon fixation in C4 photosynthesis?

A) Ribulose-1,5-bisphosphate carboxylase-oxygenase (Rubisco)

B) Phosphoenolpyruvate carboxylase (PEP carboxylase)

C) Glyceraldehyde 3-phosphate dehydrogenase

D) Pyruvate-phosphate dikinase