Teacher Answer Key

Case Study

1. Destiny's analytical reasoning and argument-construction capacity have weakened from disuse. By consistently offloading those tasks to AI throughout college, she never built strong neural pathways for independent analysis, so facing the task without the tool reveals the gap.

2. The reading explains that knowledge and the ability to use knowledge independently are different things. Knowing facts does not mean you have practiced the cognitive process of weighing them, structuring an argument, and committing to a judgment under uncertainty. Destiny has the information but not the practiced process of working with it.

Multiple Choice

1. D
2. C
3. B

Matching

1-E, 2-D, 3-A, 4-C, 5-B

Fill-in-the-Blank

1) physically, 2) hippocampal, 3) friction

Short Answer (Sample Responses)

Q1: Cognitive offloading becomes harmful when it is so complete and habitual that the underlying biological capacity atrophies from disuse. The key variable is whether the offloading supplements a skill you are actively maintaining elsewhere or replaces the only practice opportunity for that skill.

Q2: The GPS example is a controlled, measurable case showing that even a relatively simple offload produces measurable effects on spatial cognition over time. It matters because it validates the general principle and suggests that offloading more central cognitive functions to AI could produce proportionally larger skill erosion.

Q3: Making uncertain decisions is cognitively uncomfortable, and tolerating that discomfort is itself a skill that improves with practice. If a person habitually outsources decisions to AI, they avoid the discomfort, which means they never practice tolerating uncertainty. Over time, they become less capable of handling situations where no AI is available to provide an answer.