University of Toronto, Department of Electrical and Computer Engineering
ECE 1724-F1 — Performant Software Systems with Rust

Quiz 3 — Instructor Answer Key

Wednesday, October 14, 2026

1. Ⓒ **Named fields and shorthand.**

The shorthand `value` initializes that field to `12`. Field order can differ from the struct definition. The mutable binding permits changing `valid` to `true`. (Book 5.1.)

2. Ⓐ **Debug and Display are different.**

Deriving `Debug` enables debug formatting, not the default `Display` formatting requested by `{score}`. Using `{score:?}` would compile and show the struct's fields. (Book 5.2.)

3. Ⓓ **A method can share a field's name.**

The parentheses in `meter.level()` select the method, which returns `true`. `meter.level` accesses the field, whose value is `6`. The `&self` receiver borrows the instance. (Book 5.3.)

4. Ⓒ **Matching extracts a variant's data.**

The value matches `Task::Work(n)`, binding `n` to `4`. That arm evaluates to `12`. Only the matching arm runs, and both variants are covered. (Book 6.1–6.2.)

5. Ⓐ **The matching if-let branch executes.**

`Some(n)` matches `Some(4)`, so `n` is `4`. Adding it to the initial `1` yields `5`. The else branch is skipped. (Book 6.3.)

Sources: *The Rust Programming Language*, Chapter 5 and Chapter 6.