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

Quiz 3 — Multiple Choice Questions

Wednesday, October 14, 2026

Name: _____

Student Number: _____

Instructions: Choose exactly one answer per question. Unless a complete program is shown, assume the code is inside `fn main()`.

1. What does this code print?

```
struct Reading {
    value: i32,
    valid: bool
}

let value = 12;
let mut reading = Reading { valid: false, value };

reading.valid = true;

println!("{} {}", reading.value, reading.valid);
```

(A) `12 false`
(B) It does not compile.
(C) `12 true`
(D) `0 true`

2. Why does this code fail to compile?

```
#[derive(Debug)]
struct Score {
    points: u32
}

let score = Score { points: 9 };
println!("{score}");
```

(A) The placeholder requires Display, not Debug.
(B) The binding `score` must be mutable.
(C) Named structs cannot derive Debug.
(D) The field `points` must be a String.

3. What does this code print?

```
struct Meter {
    level: u32
}

impl Meter {
    fn level(&self) -> bool {
        self.level > 0
    }
}

let meter = Meter { level: 6 };
println!("{} {}", meter.level(), meter.level);
```

(A) It does not compile.
(B) `6 6`
(C) `true true`
(D) `true 6`

Quiz 3 — Multiple Choice Questions (continued)

4. What does this code print?

```
enum Task {
    Idle,
    Work(u32)
}

let task = Task::Work(4);

let cost = match task {
    Task::Idle => 0,
    Task::Work(n) => n * 3,
};

println!("{cost}");
```

Ⓐ `4`
Ⓑ `0`
Ⓒ `12`
Ⓓ It does not compile.

5. What does this code print?

```
let limit = Some(4);
let mut total = 1;

if let Some(n) = limit {
    total += n;
} else {
    total = 10;
}

println!("{total}");
```

Ⓐ `5`
Ⓑ `10`
Ⓒ `1`
Ⓓ It does not compile.