

Quiz 3

رقم الشعبة: ١

رقم التسجيل:

الاسم:

**Instructions:** Time 10 minutes. Closed books and notes. No calculators. Please answer all problems in the space provided. **No questions are allowed.**

<Good Luck>

**Q.** Draw a single-cycle processor implementation that can execute the MIPS instructions: **add** and **lw**. Include **only** the hardware components and buses needed for the execution of these two instructions. Label all datapath components, bus widths, and control signals.

Points

- 5 components
- 2 Control signals
- 3 Buses

