**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ID: \_\_\_\_\_\_\_\_\_\_\_ Section: \_\_\_\_**

**Department of Computer Science and Engineering**

**CSE340: Computer Architecture   
Spring 2016**

**Quiz-3, A**

**Full Marks: 15 Time: 20 Mins**

1. A Program is running on a specific machine (CPU) with the following parameters:

Total executed instruction count: 10,500,000 instructions Average CPI for the program: 2.7 cycles / instruction. CPU clock rate: 220 MHz? What is the execution time for this program? **5**

1. Design a single cycle datapath for the instruction **lw $10, 40($12)**. Also show the dataflow. **10**

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ID: \_\_\_\_\_\_\_\_\_\_\_ Section: \_\_\_\_**

**Department of Computer Science and Engineering**

**CSE340: Computer Architecture   
Spring 2016**

**Quiz-3, B**

**Full Marks: 15 Time: 20 Mins**

1. A Program is running on a specific machine (CPU) with the following parameters:

Total executed instruction count: 11,500,000 instructions Average CPI for the program: 2.3 cycles / instruction. CPU clock rate: 230 MHz? What is the execution time for this program? **5**

1. Design a single cycle datapath for the instruction **sw $12, 40($11)**. Also show the dataflow. **10**

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ID: \_\_\_\_\_\_\_\_\_\_\_ Section: \_\_\_\_**

**Department of Computer Science and Engineering**

**CSE340: Computer Architecture   
Spring 2016**

**Quiz-3, C**

**Full Marks: 15 Time: 20 Mins**

1. A Program is running on a specific machine (CPU) with the following parameters:

Total executed instruction count: 13,500,000 instructions Average CPI for the program: 3.3 cycles / instruction. CPU clock rate: 260 MHz? What is the execution time for this program? **5**

1. Design a single cycle datapath for the instruction **JAL Exit 2**. Also show the dataflow. **10**

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ID: \_\_\_\_\_\_\_\_\_\_\_ Section: \_\_\_\_**

**Department of Computer Science and Engineering**

**CSE340: Computer Architecture   
Spring 2016**

**Quiz-3, D**

**Full Marks: 15 Time: 20 Mins**

1. A Program is running on a specific machine (CPU) with the following parameters:

Total executed instruction count: 12,000,000 instructions Average CPI for the program: 3.3 cycles / instruction. CPU clock rate: 260 MHz? What is the execution time for this program? **5**

1. Design a single cycle datapath for the instruction **bne $10, $11, exit2**. Also show the dataflow. **10**

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ID: \_\_\_\_\_\_\_\_\_\_\_ Section: \_\_\_\_**

**Department of Computer Science and Engineering**

**CSE340: Computer Architecture   
Spring 2016**

**Quiz-2, E**

**Full Marks: 15 Time: 20 Mins**

1. A Program is running on a specific machine (CPU) with the following parameters:

Total executed instruction count: 13,500,000 instructions Average CPI for the program: 2.7 cycles / instruction. CPU clock rate: 270 MHz? What is the execution time for this program? **5**

1. Design a single cycle datapath for the instruction **JAL Exit 2**. Also show the dataflow. **10**