

# ***Assignments 5 through 8 on Computer Organization and Architecture***

## ***CS-350: Computer Organization***

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### **Textbook:**

- (1) CARPINELLI, JOHN D. (2001). *Computer System Organization and Architecture*. Boston, MA: Addison-Wesley Longman. QA76.9.C643 C37 2002; 004.2'2—dc21; 00-055836; ISBN 0-201-612534. Web-site support for this text is to be found at: [http://occawlonline.pearsoned.com/bookbind/pubbooks/carpinelli\\_awl/](http://occawlonline.pearsoned.com/bookbind/pubbooks/carpinelli_awl/)

### **Assignment 5:**

#### ***Instruction-Set Architecture:***

##### REQUIRED READINGS:

1. Carpinelli's Chapter 3: *Instruction Set Architectures*, pages 103-137).

DELIVERABLE: Carpinelli Chapter 3, questions 1, 2, 6, 7, 8, 12, 15, and 16. Hand in your answers to these questions in hardcopy form on the due date for Assignment 5. A good-faith effort to solve each of these problems is required for you to receive full credit for this assignment, regardless of whether your answers are right or wrong.

## Assignment 6:

### ***Instruction-Set Architecture:***

REQUIRED READINGS:

1. Carpinelli's Chapter 4: *Introduction to Computer Organization*, pages 141-171).

DELIVERABLE: Carpinelli Chapter 4, questions 11, 20, and 22. Hand in your answers to these questions in hardcopy form on the due date for Assignment 6. A good-faith effort to solve each of these problems is required for you to receive full credit for this assignment, regardless of whether your answers are right or wrong.

## Assignment 7:

### ***Register-Transfer Languages and CPU Design:***

REQUIRED READINGS:

1. Carpinelli's Chapter 5: *Register Transfer Languages*, chapter introduction and sections 5.1 & 5.2 (pages 175-190).
2. Carpinelli's Chapter 6: *CPU Design*, chapter introduction and sections 6.1 & 6.2 (pages 214-233).

DELIVERABLE: Carpinelli Chapter 6, questions 1, 2, and 14. Hand in your answers to these questions in hardcopy form on the due date for Assignment 7. A good-faith effort to solve each of these problems is required for you to receive full credit for this assignment, regardless of whether your answers are right or wrong.

## Assignment 8:

### *CPU Design (continued):*

REQUIRED READINGS:

1. Carpinelli's Chapter 6: *CPU Design*, sections 6.3-6.6 (pages 233-259).

DELIVERABLE: Carpinelli Chapter 6, question 28. Hand in your answer in hardcopy form on the due date for Assignment 8. A good-faith effort to solve each of this problem is required for you to receive full credit for this assignment, regardless of whether your answer is right or wrong.