COMP1400 Final Written Exam Cover page

Name: ____________________________

Student Number: __________________

Signature: ________________________

The University Of New South Wales
Final Exam - Written
Session 2, 2016

COMP1400

Programming for Designers

Time allowed: 2 hours
Total number of questions: 27
Total number of marks: 50
UNSW approved calculators may be used.
Questions are NOT worth equal marks.
Answer all questions.
This paper may not be retained by the candidate.

Answers must be written in ink.
Except where they are expressly required, pencils may be used only for drawing, sketching or graphical work.

Examiner's Use Only: ____________________________

1-20  21  22  23  24  25  26  27  Total
**COMP1400 Final Written Exam - Sample Questions**

**Part A: Multiple Choice Questions**

NOTE: Answer the questions in this section by filling in entries on the multiple-choice sheet supplied. Each question is worth 1 mark.

- 20 questions in this section (Part A), covering all the topics discussed in the lectures, labs and assignments from week-1 to week-12.
- Please note that the following sample questions do not cover all the topics/styles.

**Question 1**

What is the type of the variable `x` in the following statement?

```java
x = 32L;
```

A int  
B String  
C double  
D long  
E It has no type.

**Question 2**

What is the value of the variable `x` after following statement is executed?

```java
int x = 6 - 2 * 3 ;
```

A 12  
B 4  
C 0  
D 6  
E null

**Question 3**

What output would the following program print to the console?

```java
int x = 105;
if ((x < 0) && (x > 100)) {
    System.out.println("Invalid");
}
else if (x >= 50) {
    System.out.println("Pass");
```
A ....
B ....
C ....
D ....
E ....

Question 4
What output would the following program print to the console?

```java
int x = 0;
int y = 0;
while (x < 10){
    x += 4;
    y = x;
}
System.out.println(y);
```

A ....
B ....
C ....
D ....
E ....

Question 5
What output would the following program print to the console?

```java
int p = 0;
for (int x = 0; x < 5; x++){
    for (int y = 1; y < 5; y++){
        p = p + 1;
    }
}
System.out.println(p);
```

A ....
B ....
C ....
D ....
E ....
Part B: Short Answer Questions
NOTE: Answer all questions in the answer books provided. Show all working.

- 7 questions in this section (Part B), covering all the topics discussed in the lectures, labs and assignments from week-1 to week-12.
- Questions are NOT worth equal marks.
- Please note that the following sample questions do not cover all the topics/styles.

**Question 1**
(2 marks)

In Java, what is the difference between `int` and `Integer`?

**Question 2**
(2 marks)

What are important characteristics of local variables?

**Question 3**
(2 marks)

What is the purpose of Accessor and Mutator methods?

**Question 4**
(2 marks)

What is the purpose of using a loop statement in a program?

**Question 5**
(9 marks)

Consider the following code:

```java
.....
.....
.....
< Java code here >
.....
.....
.....
```
Answer the following questions:
(a)
(b)

Question 6
(9 marks)

Consider the follow class definitions:

.....
.....
.....
< Java code here >
.....
.....
.....

Answer the following questions:
(a)
(b)

End.