The actual quiz will be closed book.
You will be allowed one page of notes plus the official Python crib sheet.

1. Which of the following statements are true or false? (10×3 points)

   T   F   Interpreted languages produce faster code than compiled languages.
   T   F   Having a large disk drive allows us to store more data on our computer.
   T   F   Algorithms always provide the correct answer but can take forever.
   T   F   The main memory is the part of the computer that executes your programs.
   T   F   A three-bit binary number will never represent a number bigger than three.
   T   F   Python expressions always return a value.
   T   F   Programs without comments are harder to read by humans.
   T   F   In Python, Total and total are two different variable names.
   T   F   The Python input() function always returns a string.
   T   F   You cannot run Python programs on a computer that does not have the Python interpreter installed.

2. What are the final values of the variables a, b, c, and d after the following Python code is executed? (4×5 points)

   a = 6//7   b = "3" + "4"   c = 1/2 + 2   d = 2**1**2

   a = _______   b = _______   c = _______   d = _______

3. Convert the following five binary numbers to know something about yourself. (10 points)

   011 001 011 011 111 means you are __________________________________________
4. Which Boolean expression is represented by the following circuit? (10 points)

![Circuit Diagram]

5. Which of these Python expressions are equivalent? (4×5 points)

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>a + (b*c)</th>
<th>a + b*c</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>NO</td>
<td>(a*b)**2</td>
<td>a*b**c</td>
</tr>
<tr>
<td>YES</td>
<td>NO</td>
<td>a + b/c</td>
<td>(a + b)/d</td>
</tr>
<tr>
<td>YES</td>
<td>NO</td>
<td>a<em>b/c</em>d</td>
<td>(a<em>b)/c</em>d</td>
</tr>
</tbody>
</table>

6. You are asked to reorder the following Python statements so they form a program computing the cost per ounce of an item: (10 points and minus 5 points for each line that is out of order)

```python
price = float(input("Enter the price of the item: "))
print("Its cost per ounce is $%.2f" % unitCost)
nOunces = float(input("Enter the number of ounces of product: "))
unitCost = price/nOunces
```