

# CPSC 231 Midterm Review: Fall 2005

## Part I: Multiple choice (select the best answer to each question)

1. In what room is the CPSC 231 tutorial for the spring 2005 session held?
  - a. MS211
  - b. ICT211
  - c. MS707
  - d. ICT707
  - e. There's a tutorial for this class???!!!
2. Which of the following UNIX commands could you use to view the contents of a directory?
  - a. cd
  - b. ls
  - c. rm
  - d. (a) & (c)
  - e. None of the above
3. Which area of Computer Science focuses primarily on representing information in a way that makes the information easier to find and use?
  - a. Graphics
  - b. Artificial Intelligence
  - c. Data bases
  - d. Information Visualization
  - e. Human-Computer Interaction
4. Which of the alternatives below correctly rank the following storage devices from the lowest to the highest storage capability for the computers of today?
  - a. Hard drives, CD, DVD
  - b. CD, DVD, Hard drives
  - c. DVD, CD, Hard drives
  - d. CD, Hard drives, DVD
  - e. None of the above
5. What is the base ten equivalent of the decimal number 27?
  - a. 10
  - b. 1B
  - c. 27
  - d. 33
  - e. 11011

6. What is the binary equivalent of the octal number 36?
- a. 8
  - b. 30
  - c. 36
  - d. 11110
  - e. None of the above

7. What will be the output of the following program? (<SP> is used to show a space)

```
program outputExample (output);
begin
    write('hel':3);
    writeln('@':3);
end.
```

- a. hel@
- b. 'hel':3 '@':3
- c. hel<SP><SP>@
- d. <SP><SP>hel@
- e. hel@<SP><SP>

8. What will be the output of the following program?

```
program decision1 (output);
begin
    var x : integer;
    x := 1;
    if (x < 1) then
        write('x under 1;');
    if (x < 2) then
        write('x under 2;');
    if (x < 3) then
        write('x under 3;');
    if (x < 4) then
        write('x under 4;');
end.
```

- a. x under 1
- b. x under 2
- c. x under 2;x under 3;x under 4;
- d. x under 1; x under 2;x under 3;x under 4;
- e. None of the above

9. What will be the output of the following program?

```
program loop1 (output);
begin
    var i : integer;
    for i := 100 to 10 do
        write(i, ' ');
    writeln('All done!');
end.
```

- a. All done!
- b. 1 All done!
- c. 100 99 98...12 11 10 All done!
- d. 100 99 98...3 2 1 All done!
- e. 10 11 12...98 99 100 All done!

**Part II: Short answer****Question 1:** In the space provided trace the output of the following program.

```
program practiceFun (output);

var
  var1 : integer;
  var2 : integer;

procedure proc (var3 : integer; var var4 : integer);
var
  var2 : integer;
begin
  var2 := 10;
  var3 := 20;
  var4 := 30;
  writeln('3:', var2);
  writeln('4:', var3);
  writeln('5:', var4);
end;

function fun (var2 : integer):integer;
begin
  fun := var2 + 1;
end;

begin
  var var2 : integer;

  var1 := 1;
  var2 := 2;
  writeln('1:', var1);
  writeln('2:', var2);
  proc(var1, var2);
  writeln('6:', var1);
  writeln('7:', var2);

  begin
    var var2 : integer;

    var2 := 0;
    var2 := fun(var2);
    writeln('8:', var1);
    writeln('9:', var2);
  end;

  writeln('10:', var1);
  writeln('11:', var2);
end.
```

<< Write your answer here >>

**Question 2:** Write the code that will display all the even numbers between 1 and 100 (inclusive). All the numbers are to appear on one line and will be followed by a space: "2 4 6 8 10...96 98 100"

JT: Liked the practice exam, then you'll love the real thing!

