CPSC 231 Midterm Review: Fall 2007

1. Which of the following UNIX commands could be used to move to another directory?
   a. cd
   b. mv
   c. move
   d. cp
   e. passwd

2. Which of the following are examples of solid state storage devices?
   a. Hard drive
   b. RAM
   c. Zip disk
   d. DVD drive
   e. None of the above

3. Which of the following is a correct ranking the following from smallest to largest units of storage (for the word size use a modern desktop computer)?
   a. Byte, bit, word
   b. Bit, byte, word
   c. Word, bit, byte
   d. Word, byte, bit
   e. None of the above

4. What is the octal equivalent of the decimal number: 67.5?
   a. 43.8
   b. 67.5
   c. 103.4
   d. 103.5
   e. 120.5

5. What is the output of the following program?

```
program intro (output);
begin
  var ch : char;
  ch := ‘a’;
  writeln(ch);
end.
```

   a. a
   b. ‘a’
   c. ch
   d. The output of the program cannot be determined.
   e. This program will not compile.

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

```
program intro (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>

7.

```
program decision1 (output);
begin
  var num : integer;
  num := 28;
  if (num > 0) then
    write('1')
  else if (num > 10) then
    write('2')
  else if (num > 100) then
    write('3')
  else
    write('4')
  writeln('All done!');
end.
```

a. 1All done!
b. 2All done!
c. 4All done!
d. 12All done!
e. None of the above

8.

```
program decision2 (output);
begin
  var num1 : integer;
  var num2 : integer;

  num1 := 1;
  num2 := -10;

  if (num1 > 0) OR (num2 > 0) then
    write('1')
  else
    write('2');
  writeln('All done!');
end.
```

a. 1
b. 2
c. All done!
d. 1All done!
e. 2All done!

9.

```
program decision3 (output);
const
  FIXED = 28;
begin
  var num : integer;
  num := FIXED;
  if (num < 0) then
    write('1');
    write('2');
  if (num > 0) then
    write('3');
  if (num >= FIXED) then
    write('4')
  else
    write('5');
end.
```

a. 3
b. 134
c. 234
d. 235
e. 1234

10. How many times will the loop in the following program execute?

```
program loop (output);
begin
  var i : integer;
  i := 10;
  while (i < 4) do
  begin
    write(i);
    i := i + 1;
  end;
end.
```

a. 1
b. 9
c. 10
d. The loop will never execute
e. None of the above

In the space provided below 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.
```

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