ELEC1201 Test Quiz
Duration: 10 minutes.
All questions have a single correct answer.
IMPORTANT: Answers must be copied to the answer sheet, answers not copied to the answer sheet will be ignored!

Question 1
Assuming the `include <stdio.h>` directive, which statement will print the following?

5.0 to the power 3 is 125.00

A. `printf("%3f to the power %i is %6f\n", 5.0, 3, 125.0);`
B. `puts("5.0 to the power 3 is %f", 5*5*5);`
C. `printf("%i to the power %i is %i\n", 5, 3, 125);`
D. `printf("%3.1f to the power %i is %6.2f\n", 5.0, 3, 125.0);`
E. `printf("%f to the power %f is %f\n", 5.0, 3, 125.0);`

Question 2
How many of the following declarations are correct?

- `int i = 7.0;`
- `double void = 0.000;`
- `float array[2] = 0, 1, 2;`
- `char c = "\n";`

A. All four are correct
B. None
C. Three are correct
D. One is correct
E. Two are correct

Question 3
What is the value of the following expression?

\[(13 / 4 * 3) \% 5 + 1\]

A. 5.75
B. 2.95
C. 5
D. The expression is not valid
E. 1.4875
Question 4
For what values of integer i is the following expression non-zero?
\[ i > 5 \land \neg (i > 17) \]

A 6, 7, 8, ..., 16, 17
B 5, 6, 7, ..., 16, 17
C 5, 6, 7, ..., 15, 16
D 6, 7, 8, ..., 17, 18
E 6, 7, 8, ..., 15, 16

Question 5
What are the values of p and q after the following program fragment has been executed?

```c
for (p = q = 0; p < 3; p++)
{
    q += p;
}
```

A p is 0, q is 0
B p is 2, q is 0
C p is 2, q is 3
D p is 2, q is 2
E p is 3, q is 3

Question 6
Which one of the following sentences is true?

A A for loop can never be used in place of a while loop.
B The body of a do...while loop is executed zero or more times.
C The body of a do...while loop is executed at least once.
D The body of a while loop is executed at least once.
E A for loop can never be used in place of a do...while loop.

Question 7
Consider the following program fragment:

```c
int block[] = {13, 2, 5, 8};
```
Which one of the following sentences is true?

A The code will compile and run, but may damage the computer’s memory.
B The code will cause compile-time errors.
C The code will compile and will always run properly.
D The code will compile but not run.
E The code will compile and run but may produce incorrect results.
Question 8
Consider the following program fragment:

```c
int table[2][4], i, j;
for (i = 0; i < 2; i++)
{
    for (j = 0; j < 4; j++)
    {
        table[i][j] = i + j;
    }
}
```

Which one of the following sentences is true?

A. The value of table[3][1] will be set to 4.
B. The value of table[0][0] will be set to 2.
C. The code will compile but cause run-time errors.
D. The value of table[1][3] will be set to 4.
E. The code will cause compile-time errors.

Question 9
What are the values of trouble and *pt after the following program fragment has been executed?

```c
double trouble = 13.13;
double *pt;
pt = &trouble;
pt = 9.9;
```

A. trouble is 9.9, *pt is 9.9
B. trouble is 13.13, *pt is undefined
C. trouble is 9.9, *pt is 13.13
D. trouble is 13.13, *pt is 9.9
E. trouble is undefined, *pt is 9.9

Question 10
Which one of the following sentences is true?

A. Passing an array to a function involves a pointer.
B. Every function must return a value.
C. Function calls always use the call-by-value method.
D. All functions must have prototypes.
E. All the arguments of a function must be of the same data type.
Answer sheet:

For your examination, preferably print documents compiled from auto-multiple-choice.