

COP 3223 Section 3 Exam #1

Form A

Fall 2009

9/30/09

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Directions: Answer all multiple choice questions on the scantron. Each question has a single correct answer. In case of ambiguities, choose the most accurate answer. Each of these questions is worth 3 points for a correct answer. Incorrect answers and questions left blank are worth 0 points. Hand in **ONLY** the scantron, keep the test questions, and take the free response section of the exam.

1) Which of the following prints out exactly 5 backslashes?

- A) `printf("\\\\\\\\");`
- B) `printf("\\\\\\\\\\");`
- C) `printf("\\\\\\\\\\\\\\\\\\");`
- D) `printf("\\n\\n\\n\\n\\n");`
- E) None of the Above

2) What is the value of the following arithmetic expression?

$$2+3*4 - 25/(2+3)$$

- A) -2
- B) -1
- C) 15
- D) 20
- E) None of the Above

3) What is the value of the following arithmetic expression?

$$17 - 77\%9 + 2*(3 - 8\%65)$$

- A) -1
- B) 0
- C) 2
- D) 16
- E) None of the Above

4) What is the value of the following arithmetic expression?

$$(13 + 12\%(2 + 3))/6$$

- A) 2
- B) 2.5
- C) 3.5
- D) 4
- E) None of the Above

5) What is the percent code (used in `printf`, `scanf`) for an int?

- A) `%c`
- B) `%d`
- C) `%f`
- D) `%lf`
- E) None of the Above

6) What is the output of the following segment of code?

```
int a=6, b=2;
if (a > 3)
    printf("A");
if (b > a)
    printf("B");
else
    printf("C");
```

A)A B)B C)C D)AB E)None of the Above

7) What is the output of the following segment of code?

```
int a=4, b=7;
if (a > 3)
    if (b < 5)
        printf("A");
else
    printf("B");
printf("C");
```

A)A B)B C)AC D)BC E)None of the Above

8) What is the output of the following segment of code?

```
int a=8, b=5;
if (a = 3)
    printf("A");
b = 2*a;
printf("%d", b);
```

A) 6 B) 10 C) A6 D) A10 E) None of the Above

9) What is the output of the following segment of code?

```
int a=2, b=9;
if (a > 3);
    printf("A");
if (b > 8)
    printf("B");
else
    printf("C");
```

A)A B)B C)C D)AC E)None of the Above

10) What is the output of the following segment of code?

```
int a=4;
if (a > 3) {
    printf("A");
}
else
    printf("B");
    printf("C");
```

A)A B)C C)AC D)BC E)None of the Above

11) What is the value of sum at the end of the following code segment?

```
int sum=0, i;
for (i=1; i<13; i=i+2)
    sum = sum+i;
```

A)13 B)36 C)49 D)78 E)None of the Above

12) How many times does the body of the while loop below run?

```
int n = 20;
while (n > 0) {
    printf("%d\n", n);
    n = n/2;
}
```

A)4 B)6 C)10 D)20 E)None of the Above

13) What is the output of the following segment of code?

```
int a = 3;
do {
    a = a*2;
    printf("%d ", a);
} while (a < 50);
```

A)3 6 12 24 48 B)3 6 12 24 C)6 12 24 48 96
D)6 12 24 48 E)None of the Above

14) How many times does, "Go UCF!" get printed in the following code segment?

```
int i;
for (i=0; i<100; i++) {
    if ((4*i+8) % 100 == 0)
        break;
    printf("Go UCF!\n");
}
```

A)23 B)98 C)99 D)100 E)None of the Above

15) How many times does, "Go UCF!" get printed in the following code segment?

```
int i;
for (i=0; i<100; i++) {
    if (i%10 > 6)
        continue;
    printf("Go UCF!\n");
}
```

A) 60 B) 70 C) 90 D) 100 E) None of the Above

16) Which of the following expressions evaluates to a random integer in between 1 and 7, inclusive?

A) rand() B) rand()%6 C) rand()%6+1 D) rand()%7
E) None of the Above

17) Which of the following is a good reason to include comments in your code?

A) They make the code compile faster.
B) They make the code run faster.
C) They increase your frame rate to 60 frames/second.
D) They make it easier for someone else reading your code to understand it.
E) None of the Above

18) Which of the following expressions evaluates to 16?

A) sqrt(144) B) pow(2,4) C) pow(3,3) D) pow(16,2)
E) None of the Above

19) What is the approximate value of the expression pow(2,pow(2,2))?

A) 1 B) 2 C) 8 D) 16 E) None of the Above

20) The title of the 1967 movie, The Dirty Dozen, refers to a group of how many soldiers featured in the movie?

A) 12 B) 13 C) 24 D) 36 E) None of the Above