

Student Name (بالعربي):

Student ID:

Q1. Which functions will correctly return the value of the parameter x added by 1?

| I. | II. | III. |
|--|--|--|
| <pre>int Add1 (int x){ return ++x; }</pre> | <pre>int Add1 (int x){ return x++; }</pre> | <pre>int Add1 (int x){ if (x == 0) return 1; else return x += 1; }</pre> |

- a. II only
- b. I and II only
- c. I and III only
- d. II and III only

Q2. Which functions will correctly return true if its parameter x is an even integer?

| I. | II. | III. |
|--|--|---|
| <pre>bool IsEven (int x){ return (x % 2 == 0); }</pre> | <pre>bool IsEven (int x){ return (x / 2 == 1); }</pre> | <pre>bool IsEven (int x){ if (x % 2 == 1) return false; else return true; }</pre> |

- a. II only
- b. I and II only
- c. II and III only
- d. I and III only

Q3. What is the output after the execution of the following C code?

```
#include <stdio.h>
#include <math.h>
int main(){
    int a = 3, b = 2, c = 3;
    if ((a > b) && (a <= c)){
        a++;
        printf("%.1f", pow(a, c));
    }
    else{
        --a;
        printf("%.1f", pow(a, c));
    }
    return 0;
}
```

- a. 1.0 b. 81.0 c. 64.0 d. syntax error

Q4. What is the output after the execution of the following C code?

```
#include <stdio.h>
int main(){
    int n = 60;
    if (n >= 75) {
        if (n >= 95) {
            printf("%d", n++);
        }
        else
            printf("%d", --n);
    }
    else
        if (n++ > 60)
            printf("%d", n++);
        else
            printf("%d", ++n);
}
```

a. 62

b. 61

c. 60

d. 59

Q5. What is the output of the following C?

```
#include <stdio.h>
int i;
void S();
void R();

void main(){
    i = 2;
    S();
    R();
}

void S(){
    printf("%d ", i);
}

void R(){
    int i = 3;
    S();
}
```

a. 3 2

b. 2 3

c. 3 3

d. 2 2