

Student ID _____

CSE 5A

Name _____

Quiz 4

Signature _____

Fall 2004

cs5a _____

This quiz is to be taken **by yourself** with closed books, closed notes, no calculators.

1. Consider the following program. Identify the marked parts of the program with the corresponding letter from the list below.

- A) C Preprocessor Directive
- B) Global Variable
- C) Local Variable
- D) Function Definition
- E) Internal Static Variable
- F) (Formal) Parameter
- G) Function Prototype
- H) External Static Variable

```
#include <stdio.h> _____  
  
#define SIZE 5 _____  
  
int function( int array[], int size ); _____ (entire line)  
  
static long fellow = 420; _____  
  
int cling; _____  
  
void  
main( void )  
{ _____ (main(){...})  
  
    int array[SIZE] = { 0, 3, 5, 2, 6 }; _____  
  
    int result; _____  
  
    /* Other code here */  
}  
  
int  
function( int array[], int size )  
{ _____ (function(){...}) _____ (array) _____ (size)  
  
    static int i = 0; _____  
  
    int result; _____  
  
    /* Other code here */  
}
```

(continued on other side)

2. Consider the following structure definition and variable declarations.

```
struct Q4
{
    int a;
    double b;
    int c[4];
    int d;
    char e;
};
struct Q4 var1, var2, var3;
```

Fill in the blanks to complete the following tasks:

```
/* Print the value of the struct member b in var2 */
```

```
printf( "%____\n", _____ );
```

```
/* Copy the value from the struct member d in var1 to the struct member a in var3 */
```

```
_____ = _____ ;
```

```
/* Assign the value 420 to the third array element in the struct member c in var1 */
```

```
_____ = 420;
```

3. What gets printed?

```
#include <stdio.h>
#define SIZE 5

int doSomething( int array[], int size );

int
main( void )
{
    int array[SIZE] = { 0, 3, 5, 2, 6 };
    int result, i;

    result = doSomething( array, SIZE );

    printf( "%d\n", result );

    for ( i = 0; i < SIZE; ++i )
        printf( "%d\n", array[i]);

    return 0;
}

int
doSomething( int a[], int size )
{
    int i;
    int result = 0;

    for ( i = 0; i < size; ++i )
    {
        a[i] = size + a[i];
        result = result + a[i];
    }

    return result;
}
```

