**EXAMPLE**

Lab Test –

This is a reduced size sample of the proposed lab test…. Possible up to 20 short questions to be answered on this sheet and returned to the demonstrators at the end of the exam.

**DCU EXAMINATION RULES APPLY**

**CLOSED BOOK, WORK INDIVIDUALLY**

**THIS WILL GO TOWARDS YOUR FINAL GRADE !!**

*You have 1Hr to complete this Test.*

*If you are not sure of answer just try and work it out the best you can….*

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<td><strong>1.</strong></td>
<td><strong>Give C++ CODE that declares and then fills (via FOR loop) an ARRAY of int.</strong></td>
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<td><strong>2.</strong></td>
<td><strong>Give a C++ CODE that defines a STRUCT with two DATA elements Int and String:</strong></td>
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<td><strong>3.</strong></td>
<td><strong>Give a C++ statement that copies the value pointed to by Ptr1 to the memory location pointed to by Ptr2:</strong></td>
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4. Find the error in the following program:

```cpp
int main() {
    int value = 10;
    int *ptr = *value;
    cout << (->&ptr) << endl;
    return 0;
}
```

5. What if anything is wrong with the following program:

```cpp
int main() {
    Char value1 = test;
    Char value2 = Test2;
    int *pointer1 = &value1;
    int *pointer2 = &value2;
    ptr1 = ptr2;
    cout << *pointer1 << endl;
    cout << *pointer2 << endl;
    return 0;
}
```

6. What is the difference in scope between variables declared within a Block, Function, Parameter list:

```cpp
```

7. Give the C++ statement that creates a pointer multiPtr, which points to an array (myArray) of 7 dynamic objects created in memory in the same statement:

```cpp```

8. Give the output of the following program:

```cpp
int main() {
    char text[18] = “Rust never sleeps”;
    char* ptr;
    for (ptr = &text[16]; ptr != text; ptr -= 2){
        cout << ptr << endl;
        cout << *ptr << endl;
    }
}
```
9. **What does this mystery function do? It’s a common string function…**

```c
int mystery( const char *s, const char *t)
{
    while ((*s == *t) && (s != '\0')) {
        ++s;
        ++t;
    }
    return *s - *t;
}
```