



كلية تكنولوجيا الصناعة والطاقة



Information Technology
Department 2rd
Year



جامعة برج العرب التكنولوجية
BORG AL ARAB TECHNOLOGICAL UNIVERSITY

جامعة برج العرب التكنولوجية

Course: Semester:1st term 2025/2026	Lecturers: Dr. Nehal El Azaly Dr. Mohamed abd Elfathah
Programming Essentials in C++ Tutorial 10 Sheet (10)	

Q1) Choose the correct answer

Choose the correct answer for each of the following (Only ONE correct choice):

1. The following is an example of:

```
int sum(int a = 5);
```

- a) Reference parameter
- b) Pointer parameter
- c) Default parameter
- d) Array parameter

2. A function prototype is:

- a) The function body
- b) A forward declaration
- c) A loop inside a function
- d) A default parameter

3. What will happen if a function does not contain a return in a non-void function?

- a) Compiler error
- b) Code will crash
- c) Output will be random
- d) Program will skip main

4. Passing an array to a function means:

- a) Passing a pointer to the first element
- b) Copying all array elements
- c) Passing a constant value
- d) Returning multiple values

5. A recursive function is one that:

- a) Runs without stopping
- b) Calls itself
- c) Contains a loop
- d) Has no parameters

Q2) Write a C++ function named `displayMessage()` that prints “Hello Functions!”.

(No parameters, no return value.)

Q3) Write a function called `multiply` that takes two integers and returns their multiplication.

(Write the function only, not main.)

Q4) Write a program that:

- Reads an array of **5 integers**
- Sends the array to a function `printArray()`
- The function prints all elements

(Write full program: main + function)

****Q5)** Write a recursive function named `countDown(n)` that prints numbers from `n` down to 1.

Example: if `n = 5` → output: 5 4 3 2 1