1. Give the definition of Parallel computing and Parallel Programming

2. Give the flynn’s classification of computers.

3. Use an example to explain the differences between the SIMD and MIMD computers.

4. Let’s consider that a root process has N child processes. Let’s consider that the root process has an array called Data of size N. Explain the following operations using the array Data.

a. The root executes the operation broadcast of the message passing paradigm.

b. The root executes the operation scatter of the message passing paradigm.

c. The root executes the operation gather of the message passing paradigm.

5. What GPGPU stands for and what does it mean.

6. Why CUDA is said Heterogeneous computing.

7. Give the definition of the following terms:

a. Device:

b. Kernel.

c. Grid of thread blocks.

d. Warp.

8. Explain the parallel programming model of CUDA.