Question 6

Not yet answered

Marked out of 2.00

What is the **main** factor that limits the performance of modern processors?

Select one:
- ○ cache size
- ○ fixed energy budget
- ○ number of transistors

Question 7

Not yet answered

Marked out of 2.00

Most chip space of a GPU is spent on...

Select one:
- ○ Compute Units
- ○ Control Logic
- ○ Caches

Question 8

Not yet answered

Marked out of 2.00

What is the most important parallel primitive to pre-compute write locations in selection and join algorithms on GPUs?

Select one:
- ○ Vector addition
- ○ Prefix sum
- ○ Matrix multiplication
- ○ Map function

Question 9

Not yet answered

Marked out of 3.00

For maximal efficiency, GPU algorithms require...

Select one or more:
- ☐ coalesced memory access
- ☐ many control flow instructions
- ☐ high parallelism

Question 10

Not yet answered

Marked out of 2.00

Name the most efficient processing model from the following candidates:

Select one:
- ○ tuple-at-a-time processing (volcano-style processing)
- ○ vector-at-atime processing (block-oriented processing)
- ○ operator-at-a-time processing (bulk processing)

Question 11

Not yet answered

Marked out of 2.00

What is the most common performance bottleneck of a heterogeneous CPU/GPU system?

Select one:
- ○ data transfer over PCIe bus
- ○ bandwidth of GPU shared memory
- ○ latency of CPU main memory access