

Protocol SystemC and Virtual Prototyping

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1. Several theoretical questions, where you had several alternatives to choose between, and you should choose all that were correct.
2. Petri-net, you should write down all possible firing sequences that would lead to no more possible firings. Look up how reset arc and prohibitor works.
3. write a code for a combinational circuit, in the same way as the R-S latch example is written. The you should write down how the behaviour of the circuit would be with respect to the delta-delays. Check out the R-S-latch example, its basically the same concept.
4. You are supposed to fill out the protocols for the non-blocking and blocking communication, same as it is in the slides.
5. You are given several terms, and you are supposed to tell if they are used for blocking, non-blocking or both types of communication protocols. Then you are given several descriptions and you should set what description fits each term.
6. You are to implement in code the forward-transport function for an interconnect. Remember to implement delta delay, correct adresssing(always start from zero for both receiver modules)- same as the example he shows in the lecture about routing.
7. You are given the duration of execution of each part of a code. You are supposed to compute how long three times execution of this code would last. Remember to look up how the exponents of m, pico and microseconds are, and how add all these together. It was easy maths as long as you know how to do that. Next part is to compute how long this would take if you use sampling.

I think all questions were pretty easy when you have prepared well with the slides. But it is also important to understand how the actual c++ implementation works. Especially for 3. and 6.

Good luck!