



Dept. Comp. Science
Vrije Universiteit

Midterm Distributed Sys.
21.10.2002

- 1a Explain what is meant by separating policies from mechanisms in distributed systems and give an example of such a separation. 5pt
- 1b What is a multitiered client-server architecture? 5pt
- 2a How are runtime remote objects commonly realized in distributed systems? 5pt
- 2b What are crucial differences between message-queuing systems and e-mail systems? 5pt
- 3a Besides user interfaces, what is typically considered client-side software in distributed systems? 5pt
- 3b How can a stateless server maintain information on its clients? 5pt
- 4 Consider a distributed system in which each mobile object has one or more human-friendly names, as well as one or more addresses. To locate an object's address using its name, it is useful to introduce a location-independent object identifier. Why? 5pt
- 5a Lamport timestamps do not capture causality. Explain. 5pt
- 5b Explain Ricart and Agrawala's algorithm for achieving mutual exclusion. 5pt

Grading: The final grade is calculated by accumulating the scores per question (maximum: 45 points), and adding 5 bonus points. The maximum total is therefore 50 points.