

Quiz 3

CS 423UG Fall 2005

November 30, 2005

Instructions

- There are **10 questions** that appear on the next slide
- You have **10 minutes** from the time the questions, to finish your quiz
- For each question, select the BEST possible answer (one only)
- Please mark your answers clearly
- We will collect the quiz papers right after that, and continue with the lecture
- *Before I turn to the next slide, please write your name and other information clearly on the answer sheet given to you.*

1. If you can read this text clearly, you are ok. If you cannot read this, please move forward in the classroom until you can read this text comfortably.
2. Questions will appear on the next slide.

1. Which of the following typically consumes most energy in a sensor mote?

- A. CPU
- B. Temperature sensor
- C. Pressure sensor
- D. Wireless antenna

2. Which of the following is NOT a software related to the Grid?

- A. Globus
- B. Condor
- C. Eagle
- D. SETI@Home

3. Which of the following is a concern that P2P systems address but Grids don't (yet)?

- A. Scale
- B. Security
- C. Standard protocols
- D. Deployability

4. A function f in process p makes a call to function f in process q . Under which of the following circumstances (A-C) is this call NOT an RPC? Otherwise, mark D.

- A. p and q are on different machines
- B. p and q are on different LANs
- C. p and q are different processes on the same machine
- D. All the above are RPCs.

5. Which of the following is NOT a middleware?

- A. CORBA
- B. DNS
- C. NFS
- D. DSM

6. Which of the following IS an OS for sensor motes?

- A. Linux
- B. Minix
- C. Windows
- D. TinyOS

7. The Nyquist theorem says the sampling rate has to be x times the original frequency. $x=?$

- A. 1/2
- B. 2
- C. 10
- D. 0.1

8. Which of the following algorithms would be inappropriate for a real-time system?

- A. Priority
- B. Round Robin
- C. Earliest Deadline First
- D. Rate Monotonic

9. Which of the following is a security policy and NOT a mechanism?

- A. User-id's and passwords
- B. Encryption
- C. Privacy
- D. Biometric technology for laptops

10. Which of the following operations in an RPC allow at least once semantics (i.e., are idempotent)?

- A. $x++;$
- B. $x=x-y;$
- C. $x=-y;$
- D. $x=1;$