

CSCI 3325 Sample Midterm Questions

These questions are provided to give you a rough idea of the format and content of the questions on the midterm. These questions are **not** intended as a study guide and do not cover all topics you should be familiar with for the exam.

1. Provide some pseudo code for a web server. You may choose from a multi-threaded, multi-process, or event-driven structure for your web server. Clearly, you cannot provide all of the code for the web server here. Focus on important data structures that the web server maintains and the high level logic flow through the code

2. Explain the role of **marshalling** in RPC and RMI communication.

3. Suppose we have a simple transport protocol that provides reliable communication by sending a packet, waiting for an acknowledgement of that packet to verify that it was received, then sending the next packet.
 - a. What's the problem with the above approach?

 - b. Explain briefly how TCP addresses this problem.

4. Explain the difference between **internal** and **external** time synchronization.