Final Review

You should carefully study my classnotes. The following are some, but not all, of the important topics. Always study my classnotes first, then the following important topics, then the quizzes.

What we covered before the midterm will be included in the scope of the final exam, but only about 30%.

Designing the Modules

OO Design.
Representing OO using UML.
Use cases
Class diagram

Testing the Programs
Software faults and failures
Unit testing what are statement testing, branch testing, path testing etc.?
Integration testing (top down, bottom up, mixed, comparison)
Test Planning
Proving program correct, formal proof techniques

Testing the System
Principles of system testing (what are function testing, performance testing, acceptance testing, installation testing?)
What is configuration management? Versions and releases. What is regression testing? How is a test team organized?
function testing
performance testing
Acceptance testing
Installation testing
Test documentation (test plan and documents produced during automatic testing)

Maintaining the System
Nature of maintenance (what are corrective maintenance, adaptive maintenance, perfective maintenance and preventive maintenance?)
Distribution of maintenance effort: Perfective Maintenance 50%, Adaptive Maintenance 25%, corrective Maintenance 21%, preventive Maintenance 4%