

CSI518 Software Engineering
Fall 2004 Midterm Exam II

October 28, 11:45 – 1:05

1. (20 points) Define what software engineering is, what the main objective of Software Engineering is, and what activities/methodologies you would suggest to achieve this objective.
2. (20 points) To develop the payroll system described in part I, what software process model would you use and why? What are the potential risks/challenges of the process model that you chose to use and how would you resolve them?
3. (20 points) Explain why functional independence is a key for good designs and what criteria are usually used to evaluate the degree of functional independence of software designs and would you consider them as good quality indicators and why?
4. (20 points) What are CK metrics, how would you compute them, and how would you use them to improve the quality of your software product and/or process?
5. (20 points) What types (list at least three) of the risks are likely to be encountered during the requirement phase and what risk-reduction activities would you recommend for resolving the risks?