CSC408F/CSC2105F Software Engineering   **Fall 1996/97**

Mid Term Test   100 marks total. 50 minutes.   **16 Oct 1996**

ANSWER ANY FIVE QUESTIONS, ALL QUESTIONS HAVE EQUAL WEIGHT
Questions attempted in excess of 5 will not be marked.

CLOSED BOOK and NOTES, ONE 8 ½ X 11 AID SHEET ALLOWED.
Write legibly; unreadable answers are not answers.

1. Assume you are managing the development of a large software system. You have allocated 15% of your projects budget for internal and external documentation. Your company is trying to reduce costs and the Vice President for Software has asked you to reduce your budget allocation for documentation by 75%. What arguments would you make to convince the Vice Presdent that such a cut is a bad idea.

2. Assume you are doing Requirements Analysis for the BigString package. You have been given the opportunity to interview programmers at Macrame Software Inc. who are potential users of the big string package.
    a) what information relevant to Requirements Analysis would you expect to be able to extract from these programmers?
    b) give a *short* list of questions that you would like to ask these programmers.

3. The software company that you work for has changed management. The new management wants to sell your major software product MIRACLE-SOFT™ to customers who use PCs. MIRACLE-SOFT™ was originally designed and implemented (in C) for Unix platforms. Management has asked you to advise them on the feasibility of porting the MIRACLE-SOFT™ package to PCs.
    What kinds of analysis would you you do on the MIRACLE-SOFT™ software to determine if porting to this new platform was feasible and to get an estimate of the amount of effort that would be required?

4. In doing Object Oriented Design for a software system one can select a relatively small number of Objects each exporting a large number of atributes and operations or one can select a large number of Objects each exporting a small number of attributes and operations. Discuss the impact that these alternatives will have on the resultant software system.

5. Describe steps that can be taken during the requirements, specification and design phases of a software project that will help ensure that the resulting software is easy to maintain

6. Describe the Hatley and Pirbhai extensions to the structured analysis notation.

7. Describe one article that you have recently read in the `comp.risks` newsgroup which illustrates the difficulties involved in developing a set of requirements for a software system. Explain in detail the kind of difficulties that arose in the example you've chosen.

8. A software designer once said: "Software should be documented as if it was developed using the Waterfall Model even if some other development technique was actually used. Do you agree or disagree with this statement? Give arguments in favor of your answer.