ADCA / MCA (II Yr)

Term-End Examination

December, 2007

CS-10 : SOFTWARE ENGINEERING

Time : 3 hours *Maximum Marks : 75*

Note : *Question number 1 is* ***compulsory****. Answer any* ***three*** *questions from the rest.*

1. (a) With the help of a neat diagram explain how a spiral model encompasses the best features of both the classic life cycle and prototyping model. Also mention its limitations. *10*

(b) Describe a checklist for attributes to be considered when the feasibility of a system is to be evaluated. *8*

(c) Develop a complete Object Oriented Analysis (OOA) model for the manufacturing control system for an automobile assembly plant. *12*

2. Define software quality assurance. Discuss the FURPS metrics for software quality. *15*

3. (a) Explain all the four steps of Cause-Effect Graphing test-case design technique with the help of a diagram. *8*

(b) Explain the concept of Version Control during the software engineering process. 7

4. (a) With the help of an example for each, explain the following testing techniques : 8

(i) Condition testing

(ii) Loop testing

(b) List and explain the criteria to select a language/tool for developing s/w project. 7

5. (a) Draw at least two-levels of DFDs for an electricity-billing application. 8

(b) Explain the following : 7

(i) Real time databases for real time applications

(ii) Recovery testing and stress testing