

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