

MCA (Revised)
Term-End Examination
June, 2007

MCS-034 (S) : SOFTWARE ENGINEERING

Time : 3 hours

Maximum Marks : 100

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

1. (a) Explain the three stages of component based software development. 10
- (b) Write the formats for software change request, software change report and engineering change order. 10
- (c) What is the objective of software architectural design ? Explain it with an example. 10

- (d) Explain the following w.r.t. Risk management : 10
- (i) Risk Avoidance
 - (ii) Risk Detection
 - (iii) Risk Control
 - (iv) Risk Recovery
2. (a) List the objectives of Reengineering. With the help of an example, explain the software reengineering life cycle. 10
- (b) What are the objectives of a formal technical review ? Also, write at least two factors that influence the success of a formal technical review. 10
3. (a) Explain any five characteristics of successful CASE tools. 10
- (b) Draw DFDs (upto two levels) for a Library Information System. Make necessary assumptions. 10
4. (a) "Modularity is the only attribute of a s/w product that makes it manageable and maintainable." Justify the statement with the help of example. Also explain the two parameters which provide the independence between various modules for better s/w quality and manageability. 10
- (b) Explain the process of developing wireless applications using J2ME. 10

5. (a) Explain any eight key process areas (KPAs) associated with different maturity levels defined by Software Engineering Institute (SEI). 10
- (b) Differentiate between the following : 10
- (i) Conventional s/w Engineering Model vs. Cleanroom s/w engineering model
 - (ii) RAD approach vs. Prototype model

