MCA (Revised)

Term-End Examination

December, 2008

MCS-034 : SOFTWARE ENGINEERING

Time : 3 hours   *Maximum Marks : 100*
(Weightage 75%)

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

1. (a) Define the term "Baseline". Explain the   **10** process of changing a Baseline.

    (b) What are the shortcomings of Waterfall   **10** Model ? How they are overcome in the Iterative Enhancement Model? Explain.

    (c) Draw and explain the Risk Manager Tool.   **10**

    (d) Discuss the role of various CASE tools   **10** helping in the effective management of teams and projects.

2. **(a)** Explain the functionality of Coupling and Cohesion used in modular design. Give disadvantages of low Cohesion and high Coupling. **10**

(b) How can formal methods be used to specify aspects of a system other than the functionality ? Also, list some of the areas where the formal specifications can be applied. **10**

3. **(a)** With the help of a suitable example program, explain the "Boundary-Value Analysis" testing strategy by deriving boundary conditions. **10**

(b) Explain the process of estimating the cost of a Software Project. **10**

4. **(a)** Explain characteristics of a web based application. Explain the organisation of web application Teams. **10**

(b) Explain any five attributes of Software Quality. Mention any two Software Quality Standards. **10**

5.   Suppose if you are given the task to automate the   **20**
     activities of your study center, perform the
     following :

     (a)   Derive the systems requirments.

     (b)   Develop the SRS document.

     (c)   Draw the DFD's till level - 2.

     (d)   Design an ER - diagram.

     Note :   Make   assumptions   wherever
                 necessary, but list them.

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