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APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
M.Tech First Semester Examination December 2015
Computer Science and Engineering
(Computer Science and Engineering)
01CS6107 Advance Software Engineering
Answer any Two from each part.

Max.Marks: 60   Time : 3hrs

Part A

1. a.Explain how both the waterfall model of the software process and the prototyping model can be accommodated in the spiral process model   (4)
   b.If software does not wear out,why does it deteriorate?   (5)

2. a.Which software process model can be used to develop a word processor   (3)
   b. Enumerate important characteristics of a good software engineer ?   (6)

3. a.Explain COCOMO II model to estimate the effort required to build software   (3)
   b.Using an activity diagram estimate the time for completion of airline system   (6)

Part B

4. a. Compare with example functional requirement and nonfunctional requirement   (3)
   b. Write a set of object oriented requirement for a online dictionary system   (6)

5. a.Write an event table that describes the output of the algorithm for finding the roots of a quadratic
   equation using the quadratic rules   (6)
   b.Compare the benefits of an object oriented requirement with those of functional decomposition (3)

6. Assuming a real time system of your choice elicitate and analysis the requirement   (9)

Part C

7. Select a specific GUI for a program with which you are familiar and design a series of test case to exercise
   the GUI   (12)

8. a.Compare black box testing and white box testing   (4)
   b.What is the need for assessing the process maturity of a software company? Highlight the features of
   CMM.

                                                                                                         (8)

9. a.Explain the quality of software product   (4)
   b.What are the characteristics of a good test case ? Develop a set of test cases for testing the routine
   that reads in three integer values representing the three sides of a triangle and calculate the area

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