M.Tech(CSE) 1st Semester Examination
Jan.2014
Object Oriented Software Engineering & UML
Subject Code: CSL-501

Time Allowed: 03 hours. Maximum Marks: 100

Before answering the question paper the candidate should ensure that they have been supplied the correct question paper. Complaints in this regard, if any, shall not be entertained after the examination.

Note: first question is compulsory. Attempt two questions from each section A and B.

1 a) Define software engineering and its objective.
   b) What are various building blocks of UML?
   c) Explain the architecture of test model.
   d) What do you mean by integration testing? Explain. (5*4=20)

2 (a) Explain spiral model for developing software and elaborate a situation to employ it. (10)
     (b) How to collect requirements for introducing a new software product in the market? (10)

3(a) Compare water fall model, iterative model and incremental model in view of following parameters user involvement, requirement change, maintenance, knowledge of developers, within budget. (10)
     (b) Define Method, Architecture, Object, Actor and a Use Case. (10)

4(a) Explain difference between sequence diagram and structured sequence diagram. (10)
     (b) Explain Collaboration diagram. (10)

5(a) What do you mean by association, qualified association, aggregation and composition? (10)
     (b) Explain generalization, include, extend relationships. (10)

6(a) Define and Differentiate between alpha testing, beta testing, regression testing, stress testing. (10)
     (b) Explain logical view of an object oriented system. (10)

7(a) What do you mean by architectural analysis? Explain any object oriented analysis model. (10)
     (b) How will you test a module written for designing a square if the input for the module are:
         1. Length of the side of the square in the range 10 to 20
         2. The diagonal of square in the range 14 to 29. (10)