



THE SPRING END SEMESTER EXAMINATION-2013

4th Semester MCA (Regular & Back)

SOFTWARE ENGINEERING

[MCA 401]

[Regular-2011 Admitted batch & Back]

Full Marks: 60

Time: 3 Hours

Answer any six questions including question No. 1 which is compulsory.

The Figures in the margin indicate full marks.

Candidates are required to give their own words as far as practicable and all parts of a question should be answered at one place only. No marks awarded for extra questions.

1.
 - a) What are the various activities of the requirements [2x10]
analysis process?
 - b) Briefly discuss the main aims of feasibility study?
 - c) What are the types of Software system requirements?
 - d) Draw the Context level DFD for the Safe home Software.
 - e) Differentiate between aggregation and composition with
suitable examples.
 - f) Define CRC Modeling?
 - g) Describe Agility (for software projects) in your own word.
 - h) What are the advantages of Graphical User Interface?
 - i) What are the different levels of CMM?
 - j) What is the purpose of Regression testing? What are the
two main activities of Regression testing?
2.
 - a) What is meant by Data dictionary? What does a data [4]
dictionary contain?
 - b) Explain the risk management process. What are the [4]
different categories of risk?

3. a) Write short notes on the terms in Software Designing : [4]
 i) Abstraction
 ii) XP
 b) Differentiate between the functional and non-functional requirements. [4]
4. a) Explain the RAD technique in detail. [4]
 b) What is the difference between coupling and cohesion? [4]
 Explain the different types of coupling.
5. a) Why are UML Models Required? What are the types of [4]
 UML diagrams? Discuss **three** of them in detail.
 b) Explain any three debugging techniques. Give their [4]
 respective features, advantages and disadvantages.
6. a) What are the primitive symbols used for Constructing [4]
 DFDs? Also discuss the guidelines of constructing 0, 1 or
 higher level DFDs.
 b) Draw a structure chart for a Library Management System. [4]
7. a) Compare basic, intermediate and detailed COCOMO [4]
 models.
 b) How are black-box and white-box testing methods used to [4]
 design effective test cases?
8. a) What is Software Quality Assurance? Discuss the [4]
 different software quality factors.
 b) Discuss about the 4P's in Project Management Spectrum. [4]

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