R13

B.Tech III Year I Semester (R13) Regular Examinations December 2015
SOFTWARE ENGINEERING
(Common to CSE and IT)

Time: 3 hours   Max. Marks: 70

PART – A
(Compulsory Question)
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1   Answer the following: (10 X 02 = 20 Marks)
   (a) What is software engineering? What are its applications?
   (b) State and explain unified process model with its phases.
   (c) Discuss the role of developer in negotiating and validating requirements of the system to be developed.
   (d) Why scenario based modeling is getting popular in the field of requirements modeling?
   (e) What is coupling? How it differs from cohesion?
   (f) Describe software architecture with IEEE definition and its types.
   (g) Why interface analysis is critical in UI development?
   (h) Discuss testing strategy for small and large software testing.
   (i) State various responsibilities and roles of software project manager.
   (j) What are different types of software maintenance?

PART – B
(Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

2   Compare various software engineering process models with their pros & cons and applications.

OR

3   For the development of Banking software which software process model will be most suitable? Explain suggested model with processes associated with it.

UNIT – II

4   Develop Software Requirement Specification with requirement understanding for online result analysis system for college.

OR

5   Develop UML model for Digital Library System with structural and behavioral modeling diagrams.

UNIT – III

6   Design software architecture for ERP related to Student Management System with proper styles.

OR

7   Create class based component design with architecture modeling of UML for web based movie ticket management system for multiplexes.

UNIT – IV

8   State and explain Golden Rules of UI? How these rules affect on UI analysis and design?

OR

9   Compare black box testing with white box testing approaches with real test cases for any software project.

UNIT – V

10   Write down algorithm for software project estimation with COCOMO Model.

OR

11   Write short notes on:
   (a) Software Reverse Engineering.
   (b) SCM.

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