

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)

- 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 note on:

- (a) ~~Software Reverse Engineering.~~
- (b) SCM.