

B.Tech III Year I Semester (R13) Regular & Supplementary Examinations November/December 2016

**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) Define software and software engineering.
  - (b) Differentiate between personal software process model and team software process model.
  - (c) What is requirement engineering and software requirement engineering?
  - (d) Discuss the role of uses cases in UML.
  - (e) What is cohesion? How it differs from coupling?
  - (f) Define software design. Write different types of software design.
  - (g) State golden rules of user interface design.
  - (h) What is code review?
  - (i) What is work breakdown structure in software planning, used by project manager?
  - (j) Define risk management. What are its applications?

**PART – B**

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

**UNIT – I**

- 2 For the development of water level management system for skyscrapers, suggest the suitable software engineering process model. Discuss this model with its phases and processes.

**OR**

- 3 For the development of online web based hotel booking software, which software process model will be most suitable? Discuss suggested model with related phases associated with it.

**UNIT – II**

- 4 What is SRS? How will you develop requirements model to finalize specifications for college admission system?

**OR**

- 5 Develop UML model for development of portal for online store with various UML modeling diagrams.

**UNIT – III**

- 6 What is software architectural design? What are its building blocks? Develop software architecture for bus reservation system with proper styles.

**OR**

- 7 Design class based component design with architecture modeling of UML for typical search engines used to search information over net.

**UNIT – IV**

- 8 Develop user interface design for billing system for online shopping mall such as Amazon. Apply user interface analysis and design steps properly.

**OR**

- 9 What is testing strategy? Which types of tests are included in the testing strategy? Compare these testing methods with their pros and cons.

**UNIT – V**

- 10 Write short notes on the following:
- (a) COCOMO model for cost estimation.
  - (b) Software maintenance.

**OR**

- 11 Write short notes on the following:
- (a) Role and responsibilities of software project manager.
  - (b) Software maintenance process models.

\*\*\*\*\*