

B.Tech II Year II Semester (R15) Supplementary Examinations December 2018

**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) Name the different approaches to software process assessments.
  - (b) How does an incremental model differ from prototyping?
  - (c) State the need for requirements gathering.
  - (d) Draw the class diagram for sensor.
  - (e) Explain data design.
  - (f) What are constrained dependencies?
  - (g) State the three golden rules on interface design.
  - (h) What is the fork & join in use case?
  - (i) What is the difference between deep structure testing and surface structure testing?
  - (j) Draw the state diagram for the account class.

**PART – B**

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

**UNIT – I**

- 2 (a) Explain various characteristics of software.  
(b) Explain unified process and elaborate on the unified process work products.
- 3 (a) Explain personal and team process models.  
(b) Briefly discuss the agile process.

**UNIT – II**

- 4 Draw an use-case diagram for buying a stock using an on-line brokerage account.

**OR**

- 5 Why do we say that the analysis model represents a snapshot of a system in time?

**UNIT – III**

- 6 Discuss various steps involved in component based development.

**OR**

- 7 Explain architectural context diagram for the Safe Home security function.

**UNIT – IV**

- 8 (a) Explain about interface design steps.  
(b) Explain the steps involved in WebApp Interface Design.

**OR**

- 9 Draw the Swim lane diagram for prescription refill function.

**UNIT – V**

- 10 (a) Discuss the importance of test strategies for conventional software.  
(b) Describe various functional and unit testing techniques in detail.

**OR**

- 11 (a) Explain about validation testing methodology.  
(b) Compare the block box testing with white box testing.

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