

# CBCS SCHEME



15CS42

## Fourth Semester B.E. Degree Examination, June/July 2019 Software Engineering

Time: 3 hrs.

Max. Marks: 80

*Note: Answer any FIVE full questions, choosing ONE full question from each module.*

### Module-1

- 1 a. With the help of block diagram and activity model explain an insulin pump control system. Also comment on the essential high level requirements that this system must meet. (08 Marks)
- b. Explain incremental development process in detail. Also discuss the benefits of this method compared to waterfall model. (08 Marks)

OR

- 2 a. With a neat diagram explain the different stages requirement engineering process. What are its benefits? (08 Marks)
- b. Write a short note on :  
(i) Interviewing (ii) Ethnography (04 Marks)
- c. Explain software requirement document. (04 Marks)

### Module-2

- 3 a. Explain the sequence diagram for view patient information. (05 Marks)
- b. Explain use case models with example. (04 Marks)
- c. Explain the state diagram of a microwave oven with neat representation of sketch. (07 Marks)

OR

- 4 a. Describe the process of Rational Unified process in detail. (08 Marks)
- b. Describe the different proposals made about how to identify object classes in object-oriented systems. Also mention different objects identified for weather station. (08 Marks)

### Module-3

- 5 a. Explain test driven development. Also mention the benefits of the same. (08 Marks)
- b. With the help of neat diagram, explain the different stages of acceptance testing process. (08 Marks)

OR

- 6 a. Define the different Lehman's laws concerning system change. (08 Marks)
- b. Explain the process of software reengineering. Also mention the advantages of the same. (08 Marks)

### Module-4

- 7 a. What is the use of project plan? Describe the different sections of project plan for plan driven development. (08 Marks)
- b. What is the purpose of program inspection? Explain different fault classes and inspection checks done during program inspection. (08 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.  
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.

8 a. Give the description of different static software product metrics. (08 Marks)  
b. What is software pricing? Describe the different factors affecting software pricing. (08 Marks)

OR

Module-5

9 a. Explain the process of prototype development. (08 Marks)  
b. With a neat diagram, explain Boehm's spiral model. (08 Marks)

OR

10 a. Define any eight extreme programming practices. (08 Marks)  
b. Explain the process of scrum. Also mention the different key characteristics of this process. (08 Marks)

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