CBCS SCHEME

USN | | | | | | | | | |

15CS42

Fourth Semester B.E. Degree Examination, Aug./Sept. 2020
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. What are the attributes of good software? **(04 Marks)**

b. Construct and explain the water fall model of software development process. **(05 Marks)**

c. Write a note on requirement elicitation and analysis. **(07 Marks)**

OR

2 a. What are the professional and ethical responsibility of software engineering. **(04 Marks)**

b. Explain insulin pump system by constructing its activity model. **(06 Marks)**

c. Briefly describe the different types of non-functional requirements. **(06 Marks)**

Module-2

3 a. List out the different types of UML diagrams. And explain process model of involuntary detention in MHC-PMS by constructing activity diagram. **(08 Marks)**

b. Determine the state diagram for the weather station system. Explain how it responds to request for various services. **(08 Marks)**

OR

4 a. What are the different implementation issues in software Engineering? **(08 Marks)**

b. Construct the class diagram for MHC-PMS which represents classes and association between the classes. Also explain the generalization and aggregation techniques. **(08 Marks)**

Module-3

5 a. What are the different types of interfaces between program components and interface errors? **(08 Marks)**

b. Analyze the benefits of reengineering over replacement. With a block diagram describe the activities in the reengineering process. **(08 Marks)**

OR

6 a. List the advantages of software inspection over testing and show that how inspection and testing supports in validation and verification of the software process. **(08 Marks)**

b. Describe the factors used in environment assessment and application assessment. **(06 Marks)**

c. Construct the block diagram of the software evolution process. **(02 Marks)**

Module-4

7 a. What are the factors affecting software pricing. **(03 Marks)**

b. Construct and explain the UML activity diagram for the project planning. **(05 Marks)**

c. With necessary diagram, describe the phaser of software review process. **(08 Marks)**

OR

8 a. Illustrate how Agile planning is applied in "planning in XP" **(08 Marks)**

b. Write a note on inspection checklist. **(05 Marks)**

c. Listout the software quality attributes. **(03 Marks)**

Module-5

9 a. Explain Boehm's spiral model. **(08 Marks)**

b. Summarize the practices involved in extreme programming. **(08 Marks)**

OR

10 a. Describe how SCRUM process helps in Agile project management. **(08 Marks)**

b. List and explain the phases of Rational Unified process (RUP) **(08 Marks)**

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