

Third Semester B.E. Degree Examination, Dec.2019/Jan.2020
Software Engineering

Time: 3 hrs.

Max. Marks: 100

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

Module-1

- 1 a. What is Software Engineering? Explain Software Engineering Code of Ethics. (08 Marks)
- b. What are attributes of good software? Explain the key challenges facing Software Engineering. (08 Marks)
- c. Define (i) Feasibility Study (ii) Functional Requirements
(iii) Non Functional Requirements (iv) Domain Requirements. (04 Marks)

OR

- 2 a. With a neat block diagram, explain the Spiral Process Model. (08 Marks)
- b. Explain Requirement Elicitation and Analysis Process. (08 Marks)
- c. What are the fundamental activities of Software Engineering? (04 Marks)

Module-2

- 3 a. Explain following important terms with example:
(i) Identity (ii) Classification (iii) Inheritance (iv) Polymorphism. (10 Marks)
- b. Define the purpose of the following terms with suitable example and UML notation with respect to class model
(i) Multiplicity (ii) Association class (10 Marks)

OR

- 4 a. Explain in brief Class Model, State Model and Interaction model. (10 Marks)
- b. What is Object Oriented Development? Explain different stages of Object Oriented Development. (10 Marks)

Module-3

- 5 a. Explain open source development in detail. (10 Marks)
- b. Explain Model driven engineering in detail and mention Pros and Cons of it. (10 Marks)

OR

- 6 a. With a neat diagram explain context model, with an example. (08 Marks)
- b. Explain the phases of Rational Unified Process Model. (08 Marks)
- c. What is executable UML? Enlist features of executable UML. (04 Marks)

Module-4

- 7 a. With appropriate block diagram, explain the system evolution process. (08 Marks)
- b. Describe the three types of Software maintenance. Why is it sometimes difficult to distinguish between them? (08 Marks)
- c. Mention the advantages of Test Driven Development. (04 Marks)

OR

- 8 a. Explain the different levels in Development Testing. (08 Marks)
b. Explain the activities involved in Reengineering process with illustrative figures. (08 Marks)
c. Explain the four strategic options of Legacy System Management. (04 Marks)

Module-5

- 9 a. List and explain factors affecting software pricing. (08 Marks)
b. Mention the two approaches used for estimation techniques and explain algorithmic cost modeling. (08 Marks)
c. Bring out the differences between Testing and Inspection. (04 Marks)

OR

- 10 a. Explain plan driven development with a neat block diagram. (10 Marks)
b. Explain three Phases in which Review Process is carried out. (06 Marks)
c. Mention the differences between Product Standards and Process Standard. (04 Marks)

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