CBCS SCHEME

18CS35

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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