M.E. First Semester (Information Technology) (Full Time) (C.G.S.)

13422 : Elective - I : Software Engineering Methodologies

1 NMEF 5

P. Pages : 2 | **AU - 3305**

Time : Three Hours | Max. Marks : 80

Notes : 1. Assume suitable data wherever necessary.
2. Illustrate your answer necessary with the help of neat sketches.
3. Use of pen Blue/Black ink/refill only for writing the answer book.

1. a) Differentiate between waterfall model and incremental model in view of applicability. **6**

b) What do you mean by process assessment? Hence explain the impact of processes and outcomes. **7**

OR

2. a) Discuss the software process framework, thus justify its importance in software engineering. **7**

b) Explain the followings. **6**
i) Unified process. ii) Agile process.

3. a) Explain a spiral view of the requirements engineering process. **7**

b) Discuss and describe domain requirement with an example. **7**

OR

4. a) What do you mean by Non-functional requirement? Explain types of Non-functional requirement. **7**

b) Explain requirement discovery is the process of gathering information about the required system and existing system. **7**

5. a) Justify UML concept in the context programming in small and programming in large. **7**

b) What is OCL? Explain with an example. **6**

OR

6. a) Explain UML metamodel with its importance and application. **7**

b) What are the specification techniques of diagrams in UML. **6**

7. a) Explain any one behavioral model using component diagram and use cases. **7**

b) Explain activity diagram useful in taking decisions. **7**

OR

8.	a)	What is data dictionary? Describe and explain with use cases.	**7**
	b)	Explain dynamic behavior of a system using sequence diagram.	**7**
9.	a)	What are the issues to be consider during design model of a system.	**7**
	b)	Explain the advantages of abstract data type styles and repository.	**6**

OR

10.	a)	Describe design quality for a system and explain how to improve by imparting design concepts.	**7**
	b)	Discuss the issues in software architectural design.	**6**
11.	a)	What are the features of object oriented design? Thus explain the importance in software engineering.	**8**
	b)	What do you mean by modeling associations?	**5**

OR

12.	a)	Explain cohesion of object and coupling between objects.	**7**
	b)	Explain with neat sketches entity, boundary and control modeling.	**6**

****