Software engineering and Agile methodologies

MCA31

Question Bank

UNIT I

Chapter 10

1. Define Socio-Technical Systems? Describe the different layers of a Socio Technical System
2. Explain with a neat diagram the different stages of System Engineering.
3. Explain system procurement process with a neat diagram
4. Describe the process of system development
5. Write short note on system operation

Chapter 4

1. Define functional and nonfunctional requirements
2. Explain the types of nonfunctional requirements
3. Discuss the different metrics for specifying nonfunctional requirements
4. Who are the users of the SRS document? Explain in detail the different components of a SRS document.
5. Explain the requirement engineering process with the help of a spiral model
6. What are the different ways of writing system requirement and explain any one method with the help of an example?
7. Justify how use cases can be used as requirement discovery technique by considering an example
8. Explain the process of requirements elicitation and analysis
9. Write short note on requirement validation and management

UNITII

1. Draw the context model for Patient Monitoring System
2. List the types of interaction model and Draw the use case diagram for Banking system, patient monitoring system etc
3. Draw the sequence diagram for ATM scenario of withdrawing money etc
4. What are structural models and draw the class diagram for a hospital management system with all the associations between the classes.
5. Illustrate the working of oven with the help of state diagram and explain the process
6. What is software architecture? What are the nonfunctional system requirements you should address while considering different architectural style.