Generated Questions

2_MARKS:

1. Define Software Engineering.
2. List any two characteristics of software.
3. What are the three components that constitute 'Software'?
4. Name the four layers of Software Engineering as a layered technology.
5. What is the primary focus of the 'Quality Focus' layer in software engineering?
6. List two main process activities in software development.
7. Define 'Functionality' as a software characteristic.
8. What is 'Portability' in the context of software characteristics?
9. Name two types of System Software.
10. Give two examples of Application Software.
11. What is a 'Device Driver'?
12. Define 'Umbrella Activities' in software engineering.
13. List two core principles of Software Engineering.
14. What is the KISS principle in software engineering?
15. What is the primary use case for the Waterfall Model?
16. Define a 'Prototype' in the Prototyping Model.
17. What is 'Agile Software Development'?
18. List two principles of the Agile Manifesto.
19. What is 'Extreme Programming (XP)'?
20. Define 'Sprint' in the Scrum framework.
21. Name two factors for selecting a software process model.

4_MARKS:

1. Explain the concept of Software Engineering as a systematic, disciplined, and measurable approach.
2. Describe the 'Process (Foundation Layer)' in software engineering, including its main activities.
3. Explain any two characteristics of software: Reliability and Efficiency.
4. Differentiate between System Software and Application Software based on their purpose and features.
5. What is a Software Development Framework? List any two advantages of using it.
6. Briefly explain any two Software Process Framework Activities (e.g., Communication and Planning).
7. Describe the importance of 'Software Quality Assurance (SQA)' and 'Risk Management' as umbrella activities.
8. Explain the core principles of 'Modularity' and 'Abstraction' in software engineering.
9. Describe the key aspects of 'Communication Practices' in software engineering.
10. Explain the 'Planning Practices' in software engineering.
11. What are the main problems associated with the Waterfall Model?

12. Explain the concept of the 'Iterative Enhancement Model' and list two of its advantages.
13. Describe the 'Rapid Application Development (RAD) Model' and state two of its disadvantages.
14. Explain the importance of 'Agile Software Development' and list two of its advantages.
15. Briefly explain the 'Requirements Gathering' and 'Planning' phases in the Agile Software Development Process.
16. What are 'User Stories' in Extreme Programming (XP)? List two key principles of Agile approaches.
17. Explain the 'Product Backlog' and 'Sprint Backlog' in the Scrum framework.
18. Discuss how 'Clarity of Requirements' and 'Customer Involvement' influence the selection of a software process model.

6_MARKS:

1. Elaborate on Software Engineering as a layered technology, explaining each of its four layers in detail.
2. Discuss the six components of Software Characteristics, providing a brief explanation for each.
3. Explain the different types of System Software and Application Software with suitable examples for each subtype.
4. Describe the Software Process Framework Activities (Communication, Planning, Modeling, Construction, Deployment) in detail.
5. Explain the concept of 'Umbrella Activities' in software engineering and describe any three of them.
6. Discuss the core principles of Software Engineering, explaining at least five of them.
7. Explain the 'Modeling Practices' in software engineering, covering both Analysis Modeling and Design Modeling.
8. Describe the 'Waterfall Model' of software development, including its phases, and discuss its advantages and disadvantages.
9. Explain the 'Prototyping Model' in software development, outlining its steps and discussing its advantages and disadvantages.
10. Describe the 'Spiral Model' of software development, explaining its phases and discussing its advantages and disadvantages.
11. Explain the 'Agile Software Development Process' in detail, outlining its key steps and discussing its advantages and disadvantages.
12. Discuss 'Scrum' as an Agile framework, explaining its salient features, lifecycle components (Sprint, Product Backlog, etc.), and its advantages.
13. Elaborate on the various factors or criteria that influence the selection of an appropriate software process model for a project.