

1. What is the Waterfall Model also referred to as?

- a) Iterative model
- b) Linear-sequential life cycle model
- c) Spiral model
- d) Agile model

Correct answer: b

2. In which situations is the Waterfall Model useful?

- a) Projects with unclear requirements
- b) Projects where requirements are well-defined and goals are clear
- c) Small-scale projects with frequent changes
- d) Projects with high risk of changes

Correct answer: b

3. What is the first phase of the Waterfall Model?

- a) System Design
- b) Requirements
- c) Implementation
- d) Testing

Correct answer: b

4. Which phase in the Waterfall Model involves specifying hardware and system requirements?

- a) Requirements
- b) System Design
- c) Integration and Testing
- d) Deployment

Correct answer: b

5. What is Unit Testing in the Waterfall Model?

- a) Testing the entire system
- b) Testing individual units for functionality
- c) Testing after deployment
- d) Maintenance testing

Correct answer: b

6. Which is an advantage of the Waterfall Model?

- a) High flexibility for changes
- b) Simple and easy to understand and use
- c) Suitable for projects with changing requirements
- d) Produces working software early

Correct answer: b

7. What is a disadvantage of the Waterfall Model?
- a) Phases are processed one at a time
 - b) No working software until late in the life cycle
 - c) Easy to manage
 - d) Well documented results

Correct answer: b

8. Which feature of the Waterfall Model emphasizes quality control at each phase?
- a) Sequential Approach
 - b) Document-Driven
 - c) Quality Control
 - d) Rigorous Planning

Correct answer: c

9. When should the Waterfall Model be used?
- a) When requirements are likely to change
 - b) For well-understood requirements
 - c) For complex projects
 - d) When resources are unlimited

Correct answer: b

10. In the Iterative Incremental Model, what is delivered at the end of every iteration?
- a) A complete system
 - b) A product increment
 - c) Only documentation
 - d) Nothing

Correct answer: b

11. Which is an advantage of the Iterative Incremental Model?
- a) Total cost is lower
 - b) Initial product delivery is faster
 - c) Requires no planning
 - d) No customer feedback

Correct answer: b

12. What is a disadvantage of the Iterative Incremental Model?
- a) Requirements changes can be accommodated
 - b) Requires effective planning of iterations
 - c) Customers get functionality late
 - d) Lowers initial delivery cost

Correct answer: b

13. When is the Iterative Approach ideal?
- a) For projects with no feedback needed

- b) For projects involving regular deliveries
- c) For simple, one-time projects
- d) When changes are not expected

Correct answer: b

14. What is the first phase of the Iterative Incremental Model?
- a) Implementation
 - b) Planning Phase
 - c) Testing
 - d) Evaluation

Correct answer: b

15. In the Iterative Incremental Model, which phase involves gathering feedback from users?
- a) Planning
 - b) Implementation
 - c) Evaluation
 - d) Testing

Correct answer: c

16. Which is a real-world example of the Iterative Incremental Model?
- a) Building a bridge
 - b) Microsoft Windows Operating System
 - c) Constructing a house
 - d) Developing a car

Correct answer: b

17. What does Agile Methodology focus on?
- a) Strict planning without changes
 - b) Working together and making constant improvements
 - c) Single delivery at the end
 - d) No customer involvement

Correct answer: b

18. In the history of Agile, what methods emerged in the 1970s?
- a) Waterfall
 - b) Adaptive software development and evolutionary project management
 - c) Spiral
 - d) V-Model

Correct answer: b

19. What is the first stage in the Agile Methodology life cycle?
- a) Designing
 - b) Requirement Gathering

- c) Development
- d) Testing

Correct answer: b

20. Which type of testing in Agile ensures different components work together?
- a) Unit Testing
 - b) Integration Testing
 - c) Performance Testing
 - d) User Acceptance Testing

Correct answer: b

21. What is a benefit of Agile Methodology?
- a) Less flexibility
 - b) Faster Delivery
 - c) High documentation
 - d) Predictability

Correct answer: b

22. What is a limitation of Agile Methodology?
- a) Enhanced Quality
 - b) Less Documentation
 - c) Transparency
 - d) Continuous Improvement

Correct answer: b

23. When should Agile Methodology be used?
- a) For fixed requirements
 - b) For unclear or changing requirements
 - c) For small teams only
 - d) When no collaboration is needed

Correct answer: b

24. Which is a popular Agile tool for software development?
- a) Microsoft Word
 - b) Jira
 - c) Excel
 - d) PowerPoint

Correct answer: b

25. In the Incremental Process Model, how is the project broken down?
- a) Into large parts
 - b) Into smaller and easily manageable parts
 - c) Into one single part
 - d) No breakdown

Correct answer: b

26. What is the first phase of the Incremental Model?

- a) Design & Development
- b) Requirement Analysis
- c) Testing
- d) Implementation

Correct answer: b

27. Which type of Incremental Model develops software in a sequence of planned stages?

- a) Parallel Development Model
- b) Staged Delivery Model
- c) Waterfall Model
- d) Agile Model

Correct answer: b

28. When is the Incremental Process Model used?

- a) When requirements are unclear
- b) When requirements are well-defined and clear
- c) For short timelines
- d) No customer release needed

Correct answer: b

29. What is an advantage of the Incremental Process Model?

- a) Faster Software Delivery
- b) High cost
- c) Difficult error identification
- d) No risk management

Correct answer: a

30. What is a disadvantage of the Incremental Process Model?

- a) Easy changes
- b) Requires a skilled team and proper planning
- c) Low effort to fix issues
- d) Smooth flow between increments

Correct answer: b

31. According to the comparison, which model has low flexibility?

- a) Agile
- b) Waterfall
- c) Iterative Incremental
- d) Incremental

Correct answer: b

32. Which model has high customer involvement?

- a) Waterfall
- b) Iterative Incremental
- c) Agile
- d) Incremental

Correct answer: c

33. What is Software Engineering defined as?

- a) Random process of coding
- b) Systematic and disciplined approach to software development
- c) Only testing software
- d) Maintaining hardware

Correct answer: b

34. Which is an objective of Software Engineering?

- a) High waste of resources
- b) Maintainability
- c) Low reliability
- d) No portability

Correct answer: b

35. How many major components are Software Characteristics classified into?

- a) 3
- b) 6
- c) 9
- d) 12

Correct answer: b

36. Which software characteristic refers to the set of features provided to users?

- a) Reliability
- b) Functionality
- c) Efficiency
- d) Usability

Correct answer: b

37. What affects the reliability of software?

- a) Well-designed code
- b) Bugs and errors in the code
- c) High testing
- d) Good algorithms

Correct answer: b

38. Efficiency in software refers to?

- a) Wasteful use of resources

- b) Effective use of system resources
- c) Slow performance
- d) High latency

Correct answer: b

39. Usability refers to?
- a) Difficulty in use
 - b) Ease with which software can be used
 - c) High learning curve
 - d) No effort required

Correct answer: b

40. Maintainability refers to?
- a) Ease of modifications
 - b) Difficulty in changes
 - c) No errors
 - d) High cost

Correct answer: a

41. Portability allows software to be?
- a) Fixed to one environment
 - b) Transferred from one environment to another with minimum changes
 - c) Non-adaptable
 - d) Uninstallable

Correct answer: b

42. What is SDLC?
- a) Software Design Life Cycle
 - b) Software Development Life Cycle
 - c) System Development Life Cycle
 - d) Software Deployment Life Cycle

Correct answer: b

43. What is the first stage of SDLC?
- a) Defining Requirements
 - b) Planning and Requirement Analysis
 - c) Designing Architecture
 - d) Developing Product

Correct answer: b

44. SRS stands for?
- a) System Requirement Specification
 - b) Software Requirement Specification

- c) Simple Requirement System
- d) Software Resource System

Correct answer: b

45. In SDLC, which stage involves writing actual code?
- a) Planning
 - b) Designing
 - c) Developing Product
 - d) Testing

Correct answer: c

46. What type of software product is Microsoft Office?
- a) Customized
 - b) Generic
 - c) Commissioned
 - d) Specific

Correct answer: b

47. Which principle of Software Engineering emphasizes better requirement analysis?
- a) Principle 2
 - b) Principle 1
 - c) Principle 5
 - d) Principle 10

Correct answer: b

48. The KISS principle in Software Engineering stands for?
- a) Keep It Simple, Stupid
 - b) Keep It Short, Simple
 - c) Know It Simple, Smart
 - d) Keep It Smart, Simple

Correct answer: a

49. Which principle focuses on maintaining the vision of the project?
- a) Principle 3
 - b) Principle 6
 - c) Principle 9
 - d) Principle 12

Correct answer: a

50. The Law of Demeter in Software Engineering reduces?
- a) Coupling
 - b) Cohesion
 - c) Documentation
 - d) Generality

Correct answer: a