

1) What is the first step in the software development lifecycle?

System Design  
Coding  
System Testing  
Preliminary Investigation and Analysis \*

2) What does the study of an existing system refer to?

Details of DFD  
Feasibility Study  
System Analysis \*  
System Planning

3) Which of the following is involved in the system planning and designing phase of the Software Development Life Cycle (SDLC)?

Sizing  
Parallel run  
Specification freeze  
All of the above \*

5) Which of the following prototypes does not associated with Prototyping Model?

Domain Prototype  
Vertical Prototype  
Horizontal Prototype  
Diagonal Prototype \*

7) Which of the following does not relate to Evolutionary Process Model?

Incremental Model  
Concurrent Development Model  
WINWIN Spiral Model  
All of the above \*

8) What is the major drawback of the Spiral Model?

Higher amount of risk analysis  
Doesn't work well for smaller projects \*  
Additional functionalities are added later on  
Strong approval and documentation control

9) Model selection is based on \_\_\_\_\_.

Requirements  
Development team & users  
Project type & associated risk  
All of the above \*

10) Which of the following option is correct?

The prototyping model facilitates the reusability of components.

RAD Model facilitates reusability of components

Both RAD & Prototyping Model facilitates reusability of components \*

None

11) Which of the following models doesn't necessitate defining requirements at the earliest in the lifecycle?

RAD & Waterfall

Prototyping & Waterfall

Spiral & Prototyping \*

Spiral & RAD

12) When the user participation isn't involved, which of the following models will not result in the desired output?

Prototyping & Waterfall

Prototyping & RAD \*

Prototyping & Spiral

RAD & Spiral

26. \_\_\_\_\_ is a software development life cycle model that is chosen if the development team has less experience on similar projects.

a) Iterative Enhancement Model

b) RAD

c) Spiral \*

d) Waterfall

27. Agile Software Development is based on which of the following type?

a) Iterative Development

b) Incremental Development

c) Both Incremental and Iterative Development \*

d) Linear Development

28. \_\_\_\_\_ is a software developing team has a defined leader who coordinates specific tasks and secondary leaders that have responsibility for sub tasks.

a) Democratic decentralized (DD)

b) Controlled centralized (CC)

c) Controlled decentralized (CD) \*

d) None of the mentioned

29. 4GT Model is a set of \_\_\_\_\_

a) Programs

b) CASE Tools

c) Software tools \*

d) None of the mentioned

30. Engineers developing software should not
- a) be dependent on their colleagues \*
  - b) maintain integrity and independence in their professional judgment
  - c) not knowingly accept work that is outside your competence
  - d) not use your technical skills to misuse other people's computers
31. \_\_\_\_\_ is not suitable for accommodating any change?
- a) RAD Model
  - b) Waterfall Model \*
  - c) Build & Fix Model
  - d) Prototyping Model
32. The model which has a major disadvantage in terms of the coding phase of a software life cycle model is \_\_\_\_\_
- a) Rad Model
  - b) Spiral Model
  - c) 4GT Model \*
  - d) Waterfall Model
33. Adaptive Software Development(ASD) has which of the following three framework activities?
- a) speculation, collaboration, learning \*
  - b) analysis, design, coding
  - c) requirements gathering, adaptive cycle planning, iterative development
  - d) all of the mentioned
34. Which of the following is not a project factor that should be considered when planning the structure of software developing teams?
- a) The rigidity of the delivery date
  - b) The degree of sociability required for the project \*
  - c) High frustration caused by personal, business, or technological factors that causes friction among team members
  - d) The difficulty of the problem to be solved
35. What is the full form of the "COCOMO" model?
- a) Cost Constructive Estimation Model
  - b) Constructive Cost Estimation Model \*
  - c) Constructive Case Estimation Model
  - d) Constructive Cost Estimating Model
36. Which one of the following is not a software process quality?
- a) Visibility
  - b) Timeliness
  - c) Productivity
  - d) Portability \*
37. Cleanroom software development process complies with the operational analysis principles by using a method called known as
- a) referential transparency

- b) degenerative error correction
- c) box structure specification \*
- d) none of the mentioned

38. What is system software?

- a) computer program \*
- b) Testing
- c) AI
- d) IOT

39. Quality Management is known as \_\_\_\_\_

- a) SQI
- b) SQA \* (Software quality assurance)
- c) SQM
- d) SQA and SQM

40. \_\_\_\_\_ is the definition of objects in the database that leads directly to a standard approach for the creation of software documentation.

- a) Data/data integration
- b) Information sharing
- c) Document standardization \*
- d) Data integrity

41. \_\_\_\_\_ is an indirect measure of software development process.

- a) Cost
- b) Effort Applied
- c) Efficiency \*
- d) All of the mentioned

42. According to an IBM research, "31% of projects are abandoned before they are completed, 53% exceed their cost projections by an average of 189 percent, and 94 projects are restarted for every 100 projects." What is the significance of these figures?

- a) Lack of software ethics and understanding
- b) Management issues in the company
- c) Lack of adequate training \*
- d) All of the mentioned

43. Which of the following document contains the user system requirements?

- a) SRD
- b) DDD
- c) SDD
- d) SRS \* (software requirements specification)

44. \_\_\_\_\_ specification is also known as SRS document.

- a) white-box
- b) grey-box
- c) black-box \*
- d) none of the mentioned

45. Which of the following is not a part of Software evolution?

- a) Re-engineering activities
- b) Maintenance activities
- c) Development activities
- d) Negotiating with client \*

46. \_\_\_\_\_ is a Strategy to achieve Software diversity.

- a) Explicit specification of different algorithms
- b) Different programming languages
- c) Different design methods and tools
- d) All of the mentioned \*

47. In which step of SDLC actual programming of software code is done?

- a) Development and Documentation \*
- b) Maintenance and Evaluation
- c) Design
- d) Analysis

49. The word which describes the importance of software design is?

- a) Complexity
- b) Quality \*
- c) Efficiency
- d) Accuracy

50. The incorrect activity among the following for the configuration management of a software system is \_\_\_\_\_

- a) Version management
- b) System management
- c) Change management
- d) Internship management \*

1. What are the types of requirements ?

- a) Availability
- b) Reliability
- c) Usability
- d) All of the mentioned \*

2. Select the developer-specific requirement ?

- a) Portability
- b) Maintainability
- c) Availability
- d) Both Portability and Maintainability \*

3. Which one of the following is not a step of requirement engineering?

- a) elicitation
- b) design \*
- c) analysis
- d) documentation

4. FAST stands for

- a) Functional Application Specification Technique
- b) Fast Application Specification Technique
- c) Facilitated Application Specification Technique \*
- d) None of the mentioned

5. QFD stands for

- a) quality function design
- b) quality function development
- c) quality function deployment \*
- d) none of the mentioned

14) Arrange the following activities for making a software product by utilizing 4GT.

I. Design strategy

II. Transformation into product

III. Implementation

IV. Requirement gathering

4, 1, 3, 2 \*

4, 3, 2, 1

1, 2, 3, 4

1, 4, 2, 3

15) Which of the following is an example of Black Box and Functional Processing?

First Generation Language

Second Generation Language

Third Generation Language

Fourth Generation Language \*

16) \_\_\_\_\_ is identified as fourth generation language.

Unix shell \*

C++

COBOL

FORTRAN

18) Which of the following is the main advantage of deploying a 4GT model for producing small-scale products, programs, and applications?

The productivity of software engineers is improved.

The time required for developing software is reduced. \*

CASE tools and code generators help the 4GT model by providing a credible solution to their problems.

None of the above.

20) Which of the following falls under the category of software products?

Firmware, CAD

Embedded, CAM

Customized, Generic \*  
CAD, Embedded

21) Software maintenance costs are expensive in contrast to software development.

True \*  
False

22) Which of the following activities of the generic process framework delivers a feedback report?

Deployment \*  
Planning  
Modeling  
Construction

23) Which of the following refers to internal software quality?

Scalability  
Reusability \*  
Reliability  
Usability

24) RUP is abbreviated as \_\_\_\_\_, invented by a division of \_\_\_\_\_.

Rational Unified Process, IBM \*  
Rational Unified Program, IBM  
Rational Unified Process, Bell  
Rational Unified Program, Bell

25) The RUP can be defined based on three main perspectives, i.e., static, dynamic & practice. What is the purpose of static perspective?

It recommends some good practices that be included while carrying out the process.  
It displays all the enacted process activities. \*  
It portrays the phases that the model has entered over a specific time.  
All of the above.

26) Which one of the following activities is not recommended for software processes in software engineering?

Software Evolution  
Software Verification \*  
Software Testing & Validation  
Software designing

30) Which of the following activities is not applicable to agile software development?

Producing only the essential work products.  
Utilizing the strategy of incremental product delivery.  
Abolishing the project planning and testing. \*  
All of the above

31) Which of the following framework activities are carried out in Adaptive Software Development (ASD)?

Assumption, Association, Learning \*  
The investigation, Strategy, Coding  
Requirements gathering, Adaptive cycle planning, Iterative development  
All of the above

32) The \_\_\_\_\_ model helps in representing the system's dynamic behavior.

Object Model  
Context Model  
Behavioral Model \*  
Data Model

34) The \_\_\_\_\_ and \_\_\_\_\_ are the two major dimensions encompassed in the Spiral model.

Diagonal, Perpendicular  
Perpendicular, Radial  
Angular, diagonal  
Radial, Angular \* (The cumulative cost is represented by the radial dimension, whereas the angular dimension represents the progress made in the completion of each consecutive cycle. Each loop in the spiral model depicts the phase.)

35) Which of the following technique is involved in certifying the sustained development of legacy systems?

Reengineering  
Forward engineering  
Reverse engineering  
Reverse engineering and Reengineering \*

36) An erroneous system state that results in an unexpected system behavior is acknowledged as?

System failure  
Human error or mistake  
System error \*  
System fault

37) What is the name of the approach that follows step-by-step instructions for solving a problem?

An Algorithm \*



A Plan  
A List  
Sequential Structure

38) Which of the following word correctly summarized the importance of software design?

Quality \*  
Complexity  
Efficiency  
Accuracy

39) Which of the following methodology results in SA/SD features?

Gane and Sarson methodology  
DeMarco and Yourdon methodology  
Constantine and Yourdon methodology  
All of the above \*

40) \_\_\_\_\_ is not considered as an activity of Structured Analysis (SA).

Transformation of a textual problem description into a graphic model  
Functional decomposition  
All the functions represented in the DFD are mapped to a module structure \*  
All of the mentioned

41) What does a directed arc or line signify?

Data Flow \*  
Data Process  
Data Stores  
None of the above

42) What does a data store symbol in the Data Flow Diagram signify?

Logical File  
Physical File  
Data Structure  
All of the above \*

43) \_\_\_\_\_ is not a direct measure of SE process.

Effort  
Cost  
Efficiency \*  
All of the above

44) What is the main task of project indicators?

To evaluate the ongoing project's status and track possible risks. \*

To evaluate the ongoing project's status.  
To track potential risks.  
None of the above

45) What is the main intent of project metrics?

For strategic purposes  
To minimize the development schedule.  
To evaluate the ongoing project's quality on a daily basis  
To minimize the development schedule and evaluate the ongoing project's quality on a daily basis \*

46) Name the graphical practice that depicts the meaningful changes that occurred in metrics data.

Function point analysis  
Control Chart \*  
DRE (Defect Removal Efficiency)  
None of the above

47) Which parameters are essentially used while computing the software development cost?

Hardware and Software Costs  
Effort Costs  
Travel and Training Costs  
All of the above \*

48) Which of the following is an incorrect activity for the configuration management of a software system?

Change management  
System management  
Internship management \*  
Version management

49) The project planner examines the statement of scope and extracts all-important software functions, which is known as

Planning process  
Decomposition \*  
Association  
All of the mentioned

50) Which of the following is not considered as an option for achieving reliable cost and effort estimation?

The ability to translate the size estimate into human effort, calendar time, and dollars \*  
Use relatively simple decomposition techniques to generate project cost and effort

estimates.

Base estimates on similar projects that have already been completed

Use one or more empirical models for software cost and effort estimation

51) Which of the following does not complement the decomposition techniques but offers a potential estimation approach for their impersonal growth?

Empirical estimation models \*

Decomposition techniques

Automated estimation tools

Both empirical estimation models and automated estimation tools

52) Which of the following is not included in the total effort cost?

Costs of lunch time food \*

Costs of support staff

Costs of networking and communications

Costs of air conditioning and lighting in the office space

53) What is developed by utilizing the historical cost function?

Parkinson's Law

Expert judgment

Algorithmic cost modeling \*

Estimation by analogy

54) Which of the following model has a misconception that systems are built by utilizing reusable components, scripts, and database programs?

The reuse model

An early designed model

An application-composition model \*

A post architecture model

55) Which of the following is used to predict the effort as a function of LOC or FP?

COCOMO

FP-based estimation

Both COCOMO and FP-based estimation \*

Process-based estimation

56) Once the requirements are stabilized, the basic architecture of the software can be established. Which of the following version of the COCOMO model conforms to the given statement?

Application composition model \*

Post-architecture-stage model

Early design stage model

All of the above

57) Which of the following threatens the quality and timeliness of the produced software?

- Business risks
- Potential risks
- Technical risks \*
- Known risks

58) Which of the following refers to the systematic attempt, which is implemented to ascertain the threats to any project plan?

- Performance risk
- Risk identification
- Risk projection \*
- Support risk

59) Which of the following standards is used by the aviation industry?

- CTRADO-172B
- RTCADO-178B \*
- RTRADO-178B
- CTCADO-178B

60) Third-Party Certification for software standards is based on \_\_\_\_\_.

- UI 1996, Second Edition
- UI 1998, Second Edition \*
- UI 1992, Second Edition
- UT 1998, Second Edition