# Exam 2: Study Guide

Spring 2024

## Chapter 3

1. Which of the following is not necessary to apply agility to a software process?

    A. Eliminate the use of project planning and testing

    B. Only essential work products are produced

    C. Process allows team to streamline tasks

    D. Uses incremental product delivery strategy


2. How do you create agile processes to manage unpredictability?

    A. Requirements gathering must be conducted very carefully

    B. Risk analysis must be conducted before planning takes place

    C. Software increments must be delivered in short time periods

    D. Software processes must adapt to changes incrementally

    E. Both c and d


3. In agile software processes the highest priorities is to satisfy the customer through early and continuous delivery of valuable software.

    A. True

    B. False


4. Which of the following traits need to exist among the members of an agile software team?

    A. Competence

    B. Decision-making ability

    C. Mutual trust and respect

    D. All of the above


5. What are the four framework activities found in the Extreme Programming (XP) process model?

    A. analysis, design, coding, testing

    B. planning, analysis, design, coding

    C. planning, analysis, coding, testing

    D. planning, design, coding, testing


6. All agile process models conform to a greater or lesser degree to the principles stated in the "Manifesto for Agile Software Development".

    A. True

B. False

7. Which is not one of the key questions that is answered by each team member at each daily Scrum meeting?

A. What did you do since the last meeting?

B. What obstacles are you encountering?

C. What is the cause of the problems you are encountering?

D. What do you plan to accomplish be the next team meeting?

8. In Feature Driven Development (FDD) a client-valued feature is a client-valued function that can be delivered in two weeks or less.

A. True

B. False

# Chapter 11

9. Which of the following interface design principles does not allow the user to remain in control of the interaction with a computer?

A. allow interaction to interruptible

B. allow interaction to be undoable

C. hide technical internals from casual users

D. only provide one rigidly defined method for accomplishing a task

10. Which of the following interface design principles reduce the user's memory load?

A. define intuitive shortcuts

B. disclose information in a progressive fashion

C. establish meaningful defaults

D. provide an on-line tutorial

E. a, b, and c

11. The reason for reducing the user's memory load is to make his or her interaction with the computer quicker to complete.

A. True

B. False

12.  Interface consistency implies that

    A.  each application should have its own distinctive look and feel

    B.  input mechanisms remain the same throughout the application

    C.  navigational methods are context sensitive

    D.  visual information is organized according to a design standard

    E.  both b and d

13.  If past interactive models have created certain user expectations it is not generally good to make changes to the model.

    A.  True

    B.  False

14.  Which model depicts the profile of the end users of a computer system?

    A.  design model

    B.  implementation model

    C.  user model

    D.  user's model

15.  Which model depicts the image of a system that an end user creates in his or her head?

    A.  design model

    B.  user model

    C.  system model

    D.  system perception

16.  Which model depicts the look and feel of the user interface along with all supporting information?

    A.  implementation model

    B.  User Model

    C.  User's model

    D.  System Perception

17.  Which of these framework activities is not normally associated with the user interface design processes?

    A.  cost estimation

    B.  interface construction

    C. interface validation

    D. user and task analysis


18.  Which approach(es) to user task analysis can be useful in user interface design?

    A. have users indicate their preferences on questionnaires

    B. rely on the judgment of experienced programmers

    C. study existing computer-based solutions

    D. observe users performing tasks manually

    E. both c and d


19.  Object-oriented analysis techniques can be used to identify and refine user task objects and actions without any need to refer to the user voice.

    A. True

    B. False


20.  The computer's display capabilities are the primary determinant of the order in which user interface design activities are completed.

    A. True

    B. False


21.  It is sometimes possible that the interface designer is constrained by environmental factors that mitigate against ease of use for many users.

    A. True

    B. False


22.  One means of defining user interface objects and actions is to conduct a grammatical parse of the user scenario.

    A. True

    B. False


23.  Interface design patterns typically include a complete component-level design (design classes, attributes, operations, and interfaces).

    A. True

    B. False

24.   Several common design issues surface for almost every user interface including
   A. adaptive user profiles
   B. error handling
   C. resolution of graphics displays
   D. system response time
   E. both b and d

25.   Several usability measures can be collected while observing users interacting with a computer system including
   A. down time for the application
   B. number of user errors
   C. software reliability
   D. time spent looking at help materials
   E. both b and d

## Chapter 14

26.   Quality of conformance focuses on the degree to which the implementation of a design meets its requirements and performance goals.
   A. True
   B. False

27.   Which of the following is not one of the attributes of software quality?
   A. Adds value for developers and users
   B. Effective software process creates infrastructure
   C. Removes need to consider performance issues
   D. Useful products satisfy stakeholder requirements

28.   Product quality can only be assessed by measuring hard quality factors.
   A. True
   B. False

29.   Many software metrics can only be measured indirectly.
   A. True
   B. False

30.   Developers need to create a collection of targeted questions to assess each quality factor.

    A. True

    B. False

31.   Software metrics represent direct measures of some manifestation of quality.

    A. True

    B. False

32.   The quality dilemma might be summarized as choosing between building things quickly or building things correctly.

    A. True

    B. False

33.   Good enough software delivers high quality software functions along with specialized functions that contain known bugs.

    A. True

    B. False

34.   Which of the following is likely to be the most expensive cost of quality?

    A. Appraisal costs

    B. External failure costs

    C. Internal failure costs

    D. Prevention costs

35.   Poor quality leads to software risks that can become serious?

    A. True

    B. False

36.   Developers must start focusing on quality during the design phase in order to build secure systems.

    A. True

    B. False

37. Which of the following management decisions have the potential to impact software quality?

    A. Estimation decisions

    B. Risk-oriented decisions

    C. Scheduling decisions

    D. All of the above

38. Quality control encompasses a set of software engineering actions that help to ensure that each work product meets its quality goals.

    A. True

    B. False

39. The goal of quality assurance is to ensure that a software project is error free.

    A. True

    B. False

# Chapter 15

40. The purpose of software reviews is to uncover errors and defects in work products so they can be removed before moving on to the next phase of development.

    A. True

    B. False

41. In general the earlier a software defect is discovered and corrected the less costly to the overall project budget.

    A. True

    B. False

42. Defect amplification models can be used to illustrate the costs associated with using software from its initial deployment to its retirement.

    A. True

    B. False

43. Review metrics can be used to assess the efficacy of each review activity.

    A. True

    B. False

44. Defect density can be estimated for any software engineering work product.
    A. True
    B. False

45. Agile software developers are aware that software reviews always take time without saving any.
    A. True
    B. False

46. Which of the following are objectives for formal technical reviews?
    A. allow senior staff members to correct errors
    B. assess programmer productivity
    C. determining who introduced an error into a program
    D. uncover errors in software work products

47. At the end of a formal technical review all attendees can decide to
    A. accept the work product without modification
    B. modify the work product and continue the review
    C. reject the product due to stylistic discrepancies
    D. reject the product due to severe errors
    E. both a and d.

48. A review summary report answers which three questions?
    A. terminate project, replace producer, request a time extension
    B. what defects were found, what caused defects, who was responsible
    C. what was reviewed, who reviewed it, what were the findings
    D. none of the above

49. In any type of technical review, the focus of the review is on the product and not the producer.
    A. True
    B. False

50. Sample driven reviews only make sense for very small software development projects.

A. True

B. False