Name: _____ ID number: _____

1. Every process is organized into distinct phases. What is a phase organized into?

   A. activities B. cycles C. tasks D. steps

2. In general, what are the smallest manageable units of work to do within a process?

   A. roles B. work products C. steps D. tasks

3. What is the term to describe a sequence of phases outlining the structure of work to create a software product?

   A. process B. life cycle C. model D. methodology

4. Which one of the following statements is true?

   A. An activity is composed of tasks done by the same role.

   B. The number of tasks done leads to a process progressing through phases.

   C. An activity is composed of tasks involving common resources.

   D. A software life cycle process model consists of phases.

5. What are examples of resources needed to make a software product?

   A. Cost and quality B. Time and money C. Office supplies and requirements D. Designs for the product

6. What are examples of roles played by people for a software product?

   A. Team player B. Programmer and tester C. Duties and responsibilities D. Smart and empathic

7. which two of the following statements is true?

   A. An Agile methodology contains practices based on Agile principles.

   B. An Agile methodology has practices that emphasize processes and tools.

   C. Practices are tactics used to make a process happen more effectively.

   D. The Manifesto for Agile Software Development is a methodology.

8. what are examples of specification activities?

   A. Analyzing requirements, designing the architecture, and developing test procedures.

   B. Creating a process, expressing requirements, and analyzing requirements.

   C. Identifying ideas or needs, prioritizing requirements, and demonstrating to clients.

   D. Identifying ideas or needs, eliciting requirements, and managing requirements.

9. In which phase would an activity to conduct reviews and audits upon the product occur?

   A. Reviewing B. Specification C. Design and implementation D. Verification and validation

10. Which one of the following process models is not an example of a linear process model?

    A. Sawtooth B. V C. Unified D. Waterfall

11. Which two of the following statements are not true of the Waterfall software process model?

    A. The client sees working software early. B. The model is simple and readily understood. C. The model completes phases one at a time. D. Software requirements can be changed later easily.

12. Unlike Waterfall and V, what does the Sawtooth software process model further allow?

    A. Linear structure of phases B. Explicit verification at multiple levels C. Intermediate prototypes shown to client D. Approved work products

13. In the Spiral software process model, what is the correct order of quadrants or phases in each iteration?

    A. determine objectives, develop and test, evaluate prototype, plan the next iteration

    B. identify and resolve risks, determine objectives, develop and test, plan the next iteration

    C. specification, design and implementation, verification and validation, plan the next iteration

    D. determine objectives, identify and resolve risks, develop and test, plan the next iteration

14. The Unified software process model is iterative because of which of the following two reasons?

    A. The iteration phase can be repeated.

    B. Phases of the model happen in a cycle, and a cycle can be repeated.

    C. An iteration in a phase can be repeated.

    D. A spiral can be repeated.

15. In the Unified software process model, requirements are conceived in the ____ phase and further refined in the ____ phase.

    A. inception / specification B. requirements / design C. inception / elaboration D. initiation / requirements

16. In incremental prototyping, the product is built up by adding successive increments. What kinds of features get done in the successive increments?

    A. Must do features get done first, then could do features get done next.

    B. Basic forms of features get done first, then refined variations get done next.

    C. Must do features get done first, then should do features get done next.

    D. Security issues are fixed first, then new features get done next.

17. Continuous delivery mainly aims to achieve ____ by the end of each iteration?

    A. working software that is tested, ready-to-run, and releasable to others

    B. nourishment is continuously delivered to the team

    C. a meeting with the client to gain feedback on the working software

    D. the product requirements are received for the next iteration

18. Which of the following statements is not an outcome of the planning game in Extreme Programming that involves the client and development team?

    A. The required features for the product are defined and prioritized.

    B. Effort estimates are made for each required feature.

    C. Decisions are formed on what required features are to be ready for which release.

    D. A contract is drawn up for the committed set of required features.

19. A specific Extreme Programming practice is to have a system ____, so that the product intent or design can be easily explained to others.

    A. vision B. explanation C. design D. metaphor

20. Which one of the following upholds the Extreme Programming practice of simple design?

A. Give your product a simple name.

B. Create a design that covers many future possibilities.

C. Make detailed designs of all your requirements.

D. Design just what you need to make your high-priority requirements work.

21. Which of the following statements is true about the Extreme Programming practice of continuous testing?

A. Tests are written for a required feature by the client writing unit tests.

B. Tests are written for a required feature just after its source code is written.

C. Tests are written for a required feature before its source code is written.

D. Tests are written for a required feature to validate the product.

22. In the Extreme Programming practice of continuous testing, what type of test is used by the client to check that each expected feature of the overall product works as specified?

A. Continuous test B. Acceptance test C. Extreme test D. Unit test

23. In the Extreme Programming practice of pair programming, which two of the following statements is true?

A. A pair of developers works side-by-side, each with their own computer and task.

B. Pair programming increases code review.

C. A pair of developers works at the same computer, on the same task.

D. A pair of developers works at the same computer, with one assigned to do code review.

24. In Scrum, the project timeline is divided into fixed-length time boxes known as ____, with each typically lasting ____.

A. sprints / one or two months B. scrums / one or two weeks C. sprints / one or two weeks D. scrums / one or two months

25. In Scrum, the ____ is responsible for ____ on the product backlog.

A. product owner / prioritizing requirements

B. scrum master / collecting requirements

C. scrum team / prioritizing requirements

D. product owner / assigning team members to requirements

26. In Scrum, who can make changes to the requirements on the product backlog?

A. Product master B. Scrum master C. Anyone on the scrum team D. Product owner

27. What are two scrum events that are facilitated by a scrum master?

A. Daily planning and sprint review B. Daily scrum and roadblock removal C. Daily scrum and sprint planning D. Sprint planning and daily retrospective

28. How can waste arise in software development? (choose two)

A. Knowledge is shared within the team.

B. Each developer is busy, but required features are not fully ”done”.

C. The developers reuse standard software components.

D. The requirements are unclear.

29. In Lean software development, how can amplifying learning occur? (choose two)

A. The developers focus on one expedient solution.

B. The developers continuously develop alternative solutions to the problem.

C. The developers watch educational online videos while on a programming task.

D. The developers show all alternative solutions to the client.

30. In Lean software development, what does the principle of deciding as late as possible mean?

A. Decisions are made just before a deadline.

B. Decisions are made after having enough information from considering the alternatives.

C. Decisions are made to choose the latest alternative.

D. Decisions are made to delay the product delivery to a later date.

31. In Lean software development, what does the principle of delivering as fast as possible mean? (choose three)

A. Working alternatives are rapidly created.

B. The software product is delivered rapidly via courier.

C. The software product is initially simple, to reach the market rapidly.

D. Iterations are short, so feedback is frequent, and product evolution is rapid.

32. In Lean software development, what does building quality or integrity in mean? (choose two)

A. The developers refactor the source code to be simpler and easier to modify.

B. Certain sprints are dedicated to focus on quality.

C. External inspectors determine whether the software product is high quality.

D. The developers apply practices to avoid or quickly catch errors while making the software product.

33. In Lean software development, what does seeing the whole mean? (choose two)

A. The whole software product is seen as the sum of individual features.

B. The software product is understood in the context of other products by the same maker.

C. Developers leave it to the managers to understand the big picture.

D. The end user experiences a cohesive software product.

34. In Kanban, the columns on the board represent ____.

A. calendar months B. sprints C. states that tasks undergo D. individual team members

35. Following Scrum and Kanban, for a small feature development task, what should the done column signify?

A. The feature is written, tested, and documented. B. The feature is written and tested. C. The feature is written. D. The feature is written, tested, documented, and accepted.