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Time taken	4 mins 7 secs
Marks	19.00/20.00
Grade	**95.00** out of 100.00

Question 1
Correct

Mark 1.00 out of 1.00

Extreme Programming (XP) emphasizes on:

- ◉ a.   Pair programming and frequent releases ✔
- ○ b.   Extensive testing before coding
- ○ c.   Following strict deadlines
- ○ d.   Limited customer involvement

Question 2
Correct

Mark 1.00 out of 1.00

Which of the following best describes an effective quality assurance (QA) process in agile development?

- ◉ a.   QA is integrated continuously throughout the development process ✔
- ○ b.   QA is conducted only at the end of each sprint
- ○ c.   QA is handled by a separate team from the developers
- ○ d.   QA only focuses on performance testing

Question 3
Correct

Mark 1.00 out of 1.00

Who is primarily responsible for system deployment and ensuring its availability?

- ◉ a.   System Administrator ✔
- ○ b.   Database Administrator
- ○ c.   Quality Assurance Tester
- ○ d.   Business Analyst

Question 4

Correct

Mark 1.00 out of 1.00

Which of the following is a benefit of blockchain in software security?

- ⊙ a. Immutable data storage ✔
- ○ b. Centralized access control
- ○ c. High latency transactions
- ○ d. Reduced encryption standards

Question 5

Correct

Mark 1.00 out of 1.00

What role does version control play in software maintenance?

- ⊙ a. Tracking changes and managing versions ✔
- ○ b. Deleting old versions
- ○ c. Avoiding updates
- ○ d. Enhancing hardware

Question 6

Correct

Mark 1.00 out of 1.00

What is the primary role of the tests written during the TDD process?

- ⊙ a. To verify individual units or components of the software ✔
- ○ b. To test the overall performance of the system
- ○ c. To verify the system requirements
- ○ d. To ensure that user interfaces are functional

Question 7

Correct

Mark 1.00 out of 1.00

What diagram type is best suited for showing object behaviors?

- ⊙ a. State diagram ✔
- ○ b. Component diagram
- ○ c. Use case diagram
- ○ d. Deployment diagram

Question 8

Correct

Mark 1.00 out of 1.00

Which of the following is a principle of good software design?

- ⊙ a. High cohesion and low coupling ✔
- ○ b. High coupling and low cohesion
- ○ c. High cohesion and high coupling
- ○ d. Low cohesion and low coupling

Question 9

Correct

Mark 1.00 out of 1.00

The most important reason for implementing secure coding practices in software engineering is:

- ⊙ a. To prevent unauthorized access and data breaches ✔
- ○ b. To make the software faster
- ○ c. To increase software complexity
- ○ d. To improve the software's user interface

Question 10

Correct

Mark 1.00 out of 1.00

A DevOps Engineer is primarily responsible for:

- ⊙ a. Managing software releases and automation ✔
- ○ b. Designing user interfaces
- ○ c. Writing technical documentation
- ○ d. Creating test cases

Question 11

Correct

Mark 1.00 out of 1.00

Which of the following methodologies focuses on continuous delivery and integration?

- ⊙ a. DevOps ✔
- ○ b. Agile
- ○ c. Waterfall
- ○ d. Spiral

Question **12**

Correct

Mark 1.00 out of 1.00

What type of coupling is the strongest and least desirable in software design?

- ○ a.   Content coupling ✔
- ○ b.   Control coupling
- ○ c.   Data coupling
- ○ d.   Stamp coupling

Question **13**

Correct

Mark 1.00 out of 1.00

In a use case diagram, _____ are the external entities interacting with the system.

- ○ a.   Actors ✔
- ○ b.   Components
- ○ c.   Classes
- ○ d.   Objects

Question **14**

Correct

Mark 1.00 out of 1.00

A well-implemented security system in software development has no impact on the overall performance of the software.

- ○ a.   FALSE ✔
- ○ b.   TRUE

Question **15**

Correct

Mark 1.00 out of 1.00

What does AI-driven code generation primarily rely on?

- ○ a.   Machine Learning algorithms ✔
- ○ b.   Manual scripts
- ○ c.   Static libraries
- ○ d.   System logs

Question 16

Correct

Mark 1.00 out of 1.00

In the context of software maintenance, what is the primary purpose of effort estimation?

- ◉ a.   Optimizing resource utilization and timeline accuracy ✔
- ○ b.   Managing potential risks and unforeseen costs
- ○ c.   Prioritizing and planning required modifications
- ○ d.   Streamlining feature implementation and innovation

Question 17

Correct

Mark 1.00 out of 1.00

AI-driven development can enhance DevOps practices by:

- ◉ a.   Automating deployment strategies ✔
- ○ b.   Slowing down CI/CD pipelines
- ○ c.   Increasing manual configuration
- ○ d.   Removing containerization

Question 18

Incorrect

Mark 0.00 out of 1.00

Which of the following is a potential drawback of using Test-Driven Development (TDD)?

- ○ a.   Code may become too tightly coupled
- ○ b.   Increased likelihood of missing edge cases
- ○ c.   Slower feedback loop in detecting errors
- ◉ d.   A large number of redundant tests ✖

Question 19

Correct

Mark 1.00 out of 1.00

Software estimation techniques are only useful during initial development and have no role in maintenance projects.

- ◉ a.   False ✔
- ○ b.   True

Question 20

Correct

Mark 1.00 out of 1.00

In the context of software security, which term refers to verifying the identity of users or systems?

- ⦿ a.   Authentication ✔
- ○ b.   Authorization
- ○ c.   Accounting
- ○ d.   Auditing