Time left 2:58:17

Question **1**

Answer saved

Marked out of 2.00

Validation of requirements is the process of ensuring that:

○ a. the system validations can do what they were meant to achieve.

○ b. validation processes are aligned.

⦿ c. requirements that define customers' needs are meet.

○ d. the system and user validation requirements are outlined.

Clear my choice

Question **2**

Answer saved

Marked out of 2.00

An agile approach to software development consists of design and implementation, which should be:

○ a. part of a development process.

○ b. part of general activities in the software design phase.

⦿ c. central to activities in the software process.

○ d. part of a final product of the system.

Clear my choice

Additional Resources

Jump to...

Time left 2:58:10

Question **3**

Answer saved

Marked out of 2.00

The fundamental aim of agile methods is to:

- ○ a. embrace change.
- ○ b. reduce overheads in the software process.
- ○ c. keep customers involved.
- ○ d. allow customer involvement.

Clear my choice

Question **4**

Answer saved

Marked out of 2.00

Software engineering is the discipline of engineering that focusses on:

- ○ a. all aspects of software development.
- ○ b. the system development life cycle.
- ○ c. agility software development.
- ○ d. only software design and development.

Clear my choice

◄ Additional Resources

Jump to...

Time left 2:58:02

Question **5**

Not yet answered

Marked out of 2.00

What is the purpose of the software development requirements elicitation process?

- ○ a. understanding requirements classification
- ○ b. understanding the requirements discovery process
- ○ c. understanding the work that system developers do
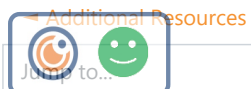- ○ d. understanding the work that stakeholders do

Question **6**

Not yet answered

Marked out of 2.00

Which of the following is not part of software reuse at different levels?

- ○ a. concept level
- ○ b. component level
- ○ c. abstraction level
- ○ d. object level

Time left 2:57:31

Question **7**

Not yet answered

Marked out of 2.00

Which of the following is not a part of software development's fundamental ideas?

○ a. software reuse

○ b. software dependability and security
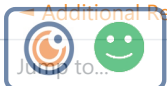
○ c. software architecture

○ d. software process

Question **8**

Not yet answered

Marked out of 2.00

Context models are used to show the operational context of the following:

○ a. a software processes.

○ b. a view.

○ c. mapping.

○ d. a system.

Time left 2:56:19

Question **9**

Not yet answered

Marked out of 2.00

To develop a system design from concept to detailed, in object -oriented design, the user will have to:

○ a. understand and define the context and the external interactions with the system.

○ b. develop a system context model to explain the system development process.

○ c. develop some system artefacts o explain the concepts.
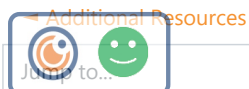
○ d. develop a blueprint to serve as a guideline.

Question **10**

Not yet answered

Marked out of 2.00

The models of the existing systems can be used during the requirements engineering to:

○ a. clarify what the existing system does.

○ b. clarifies documents used during the system implementation.

○ c. clarifies discussions during the design proposals.

○ d. generates a complete or partial system implementation.

Time left 2:55:22

Question **11**

Not yet answered

Marked out of 2.00

Testing can show only the absence of errors in a program.
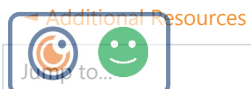
Select one:

○ True

○ False

Question **12**

Not yet answered

Marked out of 2.00

Component interfaces must be defined precisely so that other objects can use the interfaces.

Select one:

○ True

○ False

Jump to... ⇕

Time left 2:54:56

Question **13**

Not yet answered

Marked out of 2.00

Transaction processing systems are interactive systems that allow transactions in a database to be remotely accessed and modified by a number of users.
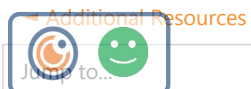
Select one:

○ True

○ False

Question **14**

Not yet answered

Marked out of 2.00

The process of managing changes to an evolving software system is known as change management.

Select one:

○ True

○ False

Time left 2:53:59

Question **15**

Not yet answered

Marked out of 2.00

Software development and implementation are two separate processes.

Select one:

○ True

○ False

Question **16**

Not yet answered

Marked out of 2.00

Open-source software development involves making the source code of a system publicly available.

Select one:

○ True

○ False

Time left 2:53:25

Question **17**

Not yet answered

Marked out of 2.00

Software development testing is the responsibility of the software development team.

Select one:

○ True

○ False

Question **18**

Not yet answered

Marked out of 2.00

All forms of software systems can benefit from the fundamental ideas of software engineering.

Select one:

○ True

○ False

Time left 2:52:55

Question **19**

Not yet answered

Marked out of 2.00

Software reengineering is a process of software development that is done to improve the maintainability of the software system.
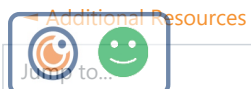
Select one:

○ True

○ False

Question **20**

Not yet answered

Marked out of 2.00

Test-first development is an approach to software development whereby tests are written before the code to be tested.

Select one:

○ True

○ False

◄ Additional Resources

Jump to...

Time left 2:52:20

Question **21**

Not yet answered

Marked out of 2.00

Which one of the following is the key factor that a user may consider when planning software development reuse?

○ a. the expected software lifetime

○ b. lower development costs

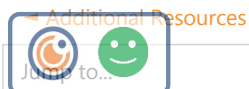○ c. reduced process risk

○ d. accelerated development

Question **22**

Not yet answered

Marked out of 2.00

Which of the following statements is correct?

○ a. the use of redundancy and diversity in hardware, software processes as well as software systems is essential to the development of dependable systems.

○ b. systems dependency is not important because failures of a critical system cannot lead to large economic loss.

○ c. availability is the probability of failure-free operation over a specified time in a given environment for a specific purpose.

○ d. reliability is the probability that a system will be operational at a certain point in time and able to deliver the requested services.

◄ Additional Resources

Jump to...

Time left 2:50:52

Question **23**
Not yet answered
Marked out of 2.00

Which of the following formal methods for software engineering are effective for discovering or avoiding two classes of error in software representations?

- ○ a. consistencies between a specification and a program
- ○ b. specification, design errors and omissions
- ○ c. programming errors
- ○ d. systems errors

Question **24**
Not yet answered
Marked out of 2.00

Which of the following software development platforms provides a range of tools to support software engineering processes?

- ○ a. the costs of integrating reusable software elements with one another and with the new code that you have developed
- ○ b. the costs of adapting and configuring the reusable software components or systems to reflect the requirements of the system that you are developing
- ○ c. language debugging system
- ○ d. where applicable, the costs of buying the reusable software; for large off-the-shelf systems, these costs can be very high

◄ Additional Resources

Jump to...

Time left 2:49:19

Question **25**

Not yet answered

Marked out of 2.00

Which one of the following does not influence the reliability of a system?

○ a. user-friendly reliability

○ b. hardware reliability

○ c. operating system reliability
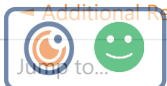
○ d. software reliability

Question **26**

Not yet answered

Marked out of 2.00

Why is it sometimes necessary to bypass the normal change management system and make urgent changes to a system?

○ a. to satisfy a customer

○ b. to test the system's vulnerability

○ c. to satisfy management

○ d. to repair a serious system fault

◄ Additional Resources

Jump to...

Time left 2:48:56

Question **27**

Not yet answered

Marked out of 2.00

Which of the following forms part of the principles of agile methodology?

○ a. collective ownership

○ b. maintaining simplicity

○ c. continuous integration

○ d. pair programming

Question **28**

Not yet answered

Marked out of 2.00

Which of the following methods will enable users to test the system before it is delivered?

○ a. change anticipation

○ b. change tolerance

○ c. incremental delivery

○ d. system prototyping

Jump to...

Time left 2:48:02

Question **29**

Not yet answered

Marked out of 2.00

Which of the following options refers to a common characteristic shared by agile methods?

○ a. the processes of specification, design and implementation are interleaved

○ b. there is a need for detailed system specification and design documentation is maximised.

○ c. the system is not developed in a series of increments.

○ d. end-users and other system stakeholders are not needed or involved in specifying and evaluating any increment.

Question **30**

Not yet answered

Marked out of 2.00

Which of the following factors is not considered while evaluating the evolution of a system application?

○ a. data

○ b. documentation

○ c. performance

○ d. health

◄ Additional Resources

Jump to...

Time left 2:47:20

Question **31**

Not yet answered

Marked out of 2.00

Testing is part of a broader process of software verification and validation.

Select one:

○ True
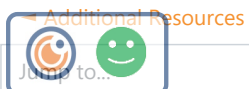
○ False

Question **32**

Not yet answered

Marked out of 2.00

Software diversity is difficult to achieve because it is practically impossible to ensure that each version of the software is truly independent.

Select one:

○ True

○ False

Additional Resources

Jump to...

Time left 2:46:38

Question **33**

Not yet answered

Marked out of 2.00

Reliability is the probability that a system will be operational at a certain point in time and able to deliver the requested services.
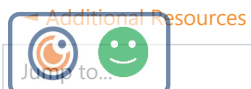
Select one:

○ True

○ False

Question **34**

Not yet answered

Marked out of 2.00

Sociotechnical systems include computer hardware, software, people within an organisation and the organisation itself.

Select one:

○ True

○ False

◄ Additional Resources

Jump to...

Time left 2:46:17

Question **35**

Not yet answered

Marked out of 2.00

Systems reprocessing is an activity that involves making changes to a program in order to slow it down.

Select one:
○ True
○ False

Question **36**

Not yet answered

Marked out of 2.00

A hazard-driven approach may be used to understand the user requirements for safety critical systems.

Select one:
○ True
○ False

◄ Additional Resources

Jump to...

Time left 2:45:11

Question **37**

Not yet answered

Marked out of 2.00

Service-oriented architecture is an approach to software engineering where reusable, standardised services are the basic building blocks for application systems.
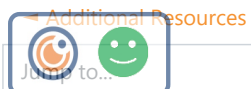
Select one:

- ● True
- ○ False

Question **38**

Not yet answered

Marked out of 2.00

Model checking is a formal approach to static analysis that exhaustively checks all states in a system for potential errors.

Select one:

- ● True
- ○ False

Time left 2:44:29

Question **39**

Not yet answered

Marked out of 2.00

The functional reliability requirements are requirements for system maintenance, such as checking the reliability requirements, which help the system to meet its non-functional requirements
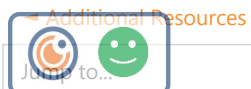
Select one:

○ True

● False

Question **40**

Not yet answered

Marked out of 2.00

Negotiating the system's test results is one of the stages in the acceptance testing process.

Select one:

○ True

● False

Additional Resources

Jump to...

Time left 2:44:22

Question **41**

Not yet answered

Marked out of 2.00

Programming language compilers that are part of a more general programming environment have a generic architecture. Which of the following components takes input language tokens and converts them into an internal format?

○ a. lexical analyser

○ b. symbol table

○ c. syntax analyser

○ d. semantic analyser

Question **42**

Not yet answered

Marked out of 2.00

For software modules, which of the following is the best option?

○ a. high cohesion and low coupling

○ b. low cohesion and high coupling

○ c. high cohesion and high coupling

○ d. It depends on the situation.

◄ Additional Resources

Jump to...

Time left 2:43:43

Question **43**

Not yet answered

Marked out of 2.00

Which of the following approaches interleaves the activities of specification, development and validation?

○ a. the waterfall model

○ b. incremental development
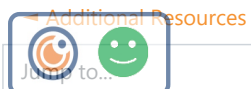
○ c. integration and configuration

○ d. SDLC

Question **44**

Not yet answered

Marked out of 2.00

Which of the following does not form part of the implementation that is particularly important for software engineering and is often not covered in programming text?

○ a. retest

○ b. reuse

○ c. configuration management

○ d. host-target development

Time left 2:42:54

Question **45**

Not yet answered

Marked out of 2.00

The design process where you identify the overall structure of the system, the principal components (sometimes called subsystems or modules), their relationships and how they are distributed is called:

○ a. components design.

○ b. database design.

○ c. interface design.

○ d. architectural design

Question **46**

Not yet answered

Marked out of 2.00

The reliability of the sociotechnical system is influenced by which of the following components?

○ a. equipment reliability

○ b. communication reliability

○ c. operator reliability

○ d. hardware reliability page

Time left 2:42:10

Question **47**

Not yet answered

Marked out of 2.00

Which of the following explains why systems dependency is so important?

- a. success of critical computer systems can lead to large economic loss.
- b. failure of non-critical computer systems can pose a threat to human life.
- c. failure of critical computer systems can lead to serious information loss.
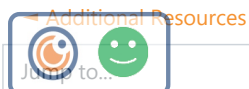- d. success of critical computer systems can lead to large physical damage.

Question **48**

Not yet answered

Marked out of 2.00

Which of the following does not form part of the MDA (model-driven architecture) method that recommends three types of abstract?

- a. a platform-specific method
- b. a platform-independent method
- c. a system-specific method
- d. a computation-independent method

◄ Additional Resources

Jump to...

Time left 2:41:31

Question **49**

Not yet answered

Marked out of 2.00

At which stage of software development would the software design be realised as a set of programs or program units and each unit verified to see if it meets its specification?

○ a. integration and system testing

○ b. system and software design

○ c. requirements analysis and definition

○ d. implementation and unit testing

Question **50**

Not yet answered

Marked out of 2.00

Which of the following do not form part of the checks that take place during the systems requirements validation process?

○ a. completeness checks

○ b. consistency checks

○ c. validity checks

○ d. parity checks