Question 1

Which statement regarding AUTOSAR Is NOT TRUE?

Options:

A- One of the objectives of AUTOSAR is to support the development of reliable systems.

B- One of the objectives of AUTOSAR Is the replicability of software components between different vehicle platforms and between different partners.

C- One of the objectives of AUTOSAR is cooperation regarding the standards and the implementation.

D- One of the objectives of AUTOSAR is the definition of a maintainable as well as adjustable open architecture.

Answer:

A

Question 2

The following methods table shows a partial functional safety guideline of an OEM (Car Maker):

Methods		ASIL			
		A	B	C	D
1a	Statement coverage	++	++	+	+
1b	Decision coverage	+	++	++	++
1c	Condition coverage	+	+	+	++

What do the plus symbols in the table mean for the taster of the supplier?

Options:

A- The tester of the suppler must choose an appropriate combination of methods and explain Ms choice. The methods with a double plus symbol should be given higher consideration

B- Single plus symbol means .should be applied by the tester of the suppler', double plus symbol means 'can be applied by the tester of the suppler'.

C- A single plus symbol means .must be covered by each tester of the supplier'. double plus symbol means 'must be tested for applicability by me tester of the contractor'.

D- Single plus symbol means .must be applied by the tester of the suppler', double plus symbol means 'can be applied by the tester of

the supplier

C

Question 3

Question Type: **MultipleChoice**

Which statement regarding the influence of the ASIL on test techniques, test types and test depths is true?

Options:

A- Depending on the determined ASIL. ISO 26262 recommends the execution of different test design techniques and test types, it differentiates between five different degrees of recommendation: e.g not at all suitable (). recommended (-).

B- As the ASIL is a characteristic of the overall product, it ONLY influences the test of the Item in combination with the other items of the vehicle

C- Depending on the determined ASIL, ISO 26262 recommends the execution of different test design techniques and test types. Given this, the standard for higher ASILs usually recommends more extensive and detailed measures.

D- With ASIL A, the tester can choose the test design techniques and the test types freely. For ASIL B. C and D. ISO 26262

recommends the execution of different measures or combinations of measures

Answer:

A

Question 4

Question Type: **MultipleChoice**

During product development what does the tester create based on the Safety requirements?

Options:

A- A software architecture that fulfils the requirement of .testability

B- Test cases to check compliance with the MISRA-C:2012 coding standard

C- Test cases and test procedure for the verification and validation of the safety related requirements

D- Test cases and test procedures for production

Answer:

A

Question 5

Which statement regarding ISO 26262 Is true?

Options:

A- According to the general opinion of experts in functional safety, ISO 26262 CANNOT be considered as a contribution to the state of science and technology regarding the functional safety of road vehicles.

B- ISO 26262 Is part of Automotive SPICE Therefore, conformity with ISO 26262 is checked as part of an Automotive SPICE-assessment to avoid the additional effort of a separate safety audit

C- ISO 26262 is a standard for functional safety. It is a domain-specific adaption of IEC 61508 for the specific characteristics in the development of safety relevant electric-electronic systems for motor vehicles.

D, ISO 26262 is a security standard; thus, information and work security are core topics of ISO 26262.

Answer:

C

Question 6

In which volume of ISO 26262 does the tester find requirements and recommendations for test- and verification-specific aspects of the SOFTWARE level?

Options:

A- Volume 7 (ISO 26262-7)

B- Volume 6 (ISO 26262-6)

C- Volume 6 (ISO 262624)

D- Volume 4 (ISO 26262-4)

Answer:

B

Question 7

Which Automotive Safety Integrity Levels does ISO 26262 describe?

Options:

A- ASIL A, ASIL B, ASIL C, ASIL D

B- MIL, SiL, PiL, HiL, ViL

C- QM, ASH A, ASIL B, ASIL C, ASIL D

D- N (None), P (Partly). L (Largely). F (Fully)

Answer:

A

Explanation:

There are four ASILs identified by ISO 26262A, B, C, and D. ASIL A represents the lowest degree and ASIL D represents the highest degree of automotive hazard.

https://www.synopsys.com/automotive/what-is-asil.html#:~:text=There%20are%20four%20ASILs%20identified,highest%20degree%20of%20automotive%20hazard.

Question 8

Which statement regarding the contribution of the tester to a safety culture is true?

Options:

A- The tester performs the hazard analysis and the risk assessment for the product at the beginning of the project.

B- The tester always takes the overall context of the product development Into account when she/he executes their tasks

C- In systems that could potentially lead to physical injury or damage to the health of people the tester analyses potential hazards.

D- The tester creates the hardware-software interface and provides this document to the safety manager

Answer:

A

Question 9

As a unit tester (.module tester") you are working on a project and are supposed to develop a test strategy.

Which of the following test and analysis procedures is. according to Automotive SPIC NOT an appropriate clamant of a verification strategy for unit tests (software units), which ware "manually coded"?

Note The components to verify are non-safety relevant and safely relevant (up to ASIL-C) components

Options:

A- Tool supported static analysis

B- Hardware-in-the-Loop-Tests

C- Unit tests (Test of Software-Units)

D- Code-Reviews

Answer:

A

Question 10

Question Type: MultipleChoice

Which of the statements regarding traceability in Automotive SPICES 3.x is true?

Options:

A- The linking of requirements, test cases and test togs provides traceability and enables the desired verification of test cases for test case coverage

B- A1:N relation exists; for example If a test case is tested with the help of several requirements and is therefore linked to several requirements

C- The linking of a requirement, a derived test case and the associated test implementation provides the base for a complete testability.

D- With complete tractably It Is possible to trace test cases to their requirements and test cases which have been executed to their corresponding results.

Answer:

D

Question 11

Question Type: **MultipleChoice**

According to Automotive SPICE 3.x, which statement regarding the requirements for a test strategy Is correct?

Options:

A- The test logs should be automated on all lest levels as much as possible to increase the comparability of the test results and reduce the effort for the lest execution.

B- In the regression testing strategy, methods must be defined for an impact analysis and the selection of appropriate test cases for regression testing

C- The test report must describe the test process including the identification of menaces and dependencies from other processes.

D- The test log must Include methods for test case creation. for the selection of test cases, for the creation of test data and for the lest execution

Answer:

D

Question 12

Question Type: MultipleChoice

Imagine you are participating in an Automotive SPICE assessment In your rote as a software tester, and you receive the Information that your process has been assessed with "P" on process attribute PA1.1 at capability level 1. Which meaning it correct?

Options:

A- You have NOT fulfilled capacity level 1.

B- You have fulfilled capacity level 3.

C- You have fulfilled capacity level 2.

D- You have fulfilled capability level 1.

Answer:

D