

1.

The specification of an income tax calculation system describes as follows:

- First 4000 EUR are salary tax free.
- Next 1500 EUR are taxed at 10%.
- Next 28000 EUR are taxed at 22%.
- Any further amount is taxed at 40%.

In which of the following test cases (incomes are rounded to Euro) representatives from three DIFFERENT equivalence classes will be checked?

- A** 4000 EUR, 4200 EUR, 5600 EUR.
- B** 28000 EUR, 28001 EUR, 32001 EUR.
- C** 4000 EUR, 28001 EUR, 32001 EUR.
- D** 32001 EUR, 34000 EUR, 36500 EUR.

2.

During a workshop risks will be identified, analyzed and evaluated.

Which two of the following measures could be candidates for next actions in the risk management process?

- A** Delegating risk to another party
- B** Ignoring, or accepting particular risks
- C** Initiating an expert interview for risk analysis
- D** Determining the subjective impact and the likelihood of each risk
- E** Evaluating remaining risks

3.

You have decided to apply an exploratory test in your project as a first step. You create a test charter for the tester. Which two of the following declarations should be included in the test charter?

- A** Definition of test design techniques to be applied
- B** Specification of test objectives that should be followed
- C** Identification of test objects to be tested
- D** Identification of expected behaviour and expected results
- E** Test data definition for test execution

4.

You have to test a newly developed software that evaluates credits.

You only have sparse information from the operational department available in form of system specification documents and checklists regarding internal regular formalities to be followed during credit allocation.

You would like to have a quick overview about the product in order to plan further testing tasks. Which two of the following test design techniques would give you the fastest and most efficient directions for further necessary and reasonable tests?

- A** Exploratory testing
- B** Defect taxonomy
- C** Checklist based testing
- D** Fault attack
- E** Error guessing

5.

You apply decision table testing. You should consider 5 different binary conditions for the function to be tested. Test exit criteria requires that 75% of the rules must be covered.

How many test cases are at least necessary to fulfil the exit criteria?

- A** 24
- B** 32
- C** 16
- D** 12

6.

Functional testing of a newly developed browser has been completed successfully. Since the development company puts emphasis on the usability of the software, further usability tests should be executed. Which two of the following test techniques are most appropriate for usability testing?

- A** Usability survey
- B** Performance-benchmarking
- C** Maintainability testing
- D** Load testing
- E** Expert interview

7.

The test approach in your project contains functional security testing. What is the test objective of these tests?

- A** Preventing unauthorized access to data
- B** Avoiding malicious hacking attacks

- C Avoiding data loss due to a system crash
- D Ensuring accuracy of the application

8.

You have finished acceptance testing and created the corresponding test report. You organize an acceptance review. Which two of the following review types are the most appropriate ones?

- A Informal review
- B Audit
- C Inspection
- D Management-Review
- E Technical review

9.

Which two of the following functionalities or intended uses should at least be fulfilled by a test management tool?

- A Supporting, planning and tracing of test execution
- B Controlling the quality of the test cases
- C Selecting test design techniques to be used
- D Metrics regarding test artifacts to document test progress
- E Comparison of load and response times

10.

You should test a newly developed software for food storage administration. You only have sparse design and requirement documentation available. You want to have a rather quick overview about the state of the software to be tested.

Which of the following test design techniques is the most appropriate one for that purpose?

- A Test case design based on bug taxonomy
- B Error guessing
- C Exploratory testing
- D Checklist-based testing

11.

Which of the following statements about defect based test design techniques is correct?

- A Defect based test design techniques will be applied when many defects are expected.
- B Defect based test design techniques can be based on existing bug taxonomy.
- C No coverage criteria are applicable for defect based test design techniques.
- D Defect based test design techniques save efforts of prior test case design.

12.

An input dialog contains 2 input fields divided into 2 equivalence classes:

- month: 12 valid and 3 invalid equivalence classes
- weekday: 7 valid and 3 invalid equivalence classes

Which of the following statements about the required number of test cases is correct?

- A** Ideally 36, but at least 21 test cases should be executed.
- B** Ideally 756, but at least 84 test cases should be executed.
- C** Ideally 57, but at least 25 test cases should be executed.
- D** Ideally 90, but at least 18 test cases should be executed.

13.

You work as a test analyst for a customer relationship management software. Recent events and decisions:

- support team will be doubled in the next 6 months to support a big customer
- support team has been complaining for a longer time about long response times and inconvenient usage of their customer relationship management software.
- A new standard software for customer contact management should be introduced in 18 months in an area that has been established and unchanged for several years.

Hardware supplier has announced that it will deliver a system software update in the near future that has to be installed by all means. Only some scripts might need an update for that. Thanks to the update some bugs might have been corrected and data throughput might have been got definitely higher.

Existing old test plan contains a list of risks. Which two of following test measures are most appropriate to improve customer contact management system by having affordable and acceptable risks?

- A** Executing system software update with a checked fallback strategy as an emergency measure.
- B** Concentrating only to the directly affected users during reworking the list of risks since otherwise scope of the list would be too wide.
- C** Evaluating the risk about that required performance not reached even after upgrading.
- D** Defining a corrective action that licenses should be extended due to potential license bottleneck due to test team increase.
- C** Evaluating risks on a broader base to identify new risks and to re-evaluate all risks if possible.

14.

A shop window lighting system of a fashion shop should be controlled. An overview of all luminaries and sensors is presented. Luminaries are collected to groups that are controlled together.

Requirements describe on which conditions lights should be switched on, which are required beam intensity and which groups of luminaries should and can be active simultaneously.

Test objective is to check dependencies between sensors and luminary groups systematically.

Which of following test design techniques is most appropriate to support this test objective to create system test cases?

- A Exploratory testing
- B Use case testing
- C Decision table testing
- D Business process-based testing

15.

Below you can find an extract from a checklist that will be used for reviews of requirements and use cases in your company:

Review-Checklist „Requirements and use cases (R&U)“:

- (a) each element of R&U has a unique short identifier.
- (b) each element of R&U has a unique title
- (c) objectives are clear for each use case
- (d) each use case has a primary actor
- (e) there are preconditions and postconditions defined for each base scenario
- (f) major scenarios are clearly separated from alternative scenarios

During the review you underline following use case:

Use case 142: „Buying a vehicle“

- precondition: UC_B_F00: actual vehicle is available in the system
- base scenario: UC_B_F01: buy a vehicle
- alternative scenario: UC_A_F02: vehicle not found
- alternative scenario: UC_A_F03: termination
- alternative scenario: UC_A_F04: vehicle sold

How many deviation from the checklist R&U does this use case contain?

- A 1 deviation
- B 2 deviations
- C 3 deviations
- D no deviation

16.

Following decision table is given:

Conditions:	Rule 1	Rule 2	Rule 3	Rule 4
Does he live in England?	No	Yes	Yes	Yes
Age between 18 and 55?	-	No	Yes	Yes
Smoker?	-	-	No	Yes
Actions:				
Customer insurance	-	-	X	X

Offer a discount	-	-	X	-
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There are two test cases available:

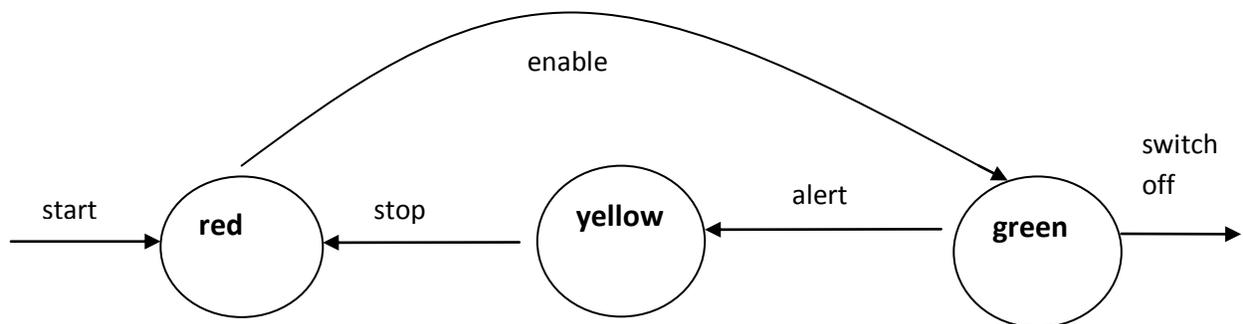
- A) customer Smith is a 32 years old smoker that lives in London
- B) customer Gerrard is a 65 years old non-smoker that lives in Paris

Which are the expected actions for the test case above?

- A A: insurance without discount, B: no insurance
- B A: insurance with 10% discount, B: insurance without discount
- C A: insurance without discount, B: insurance with 10% discount
- D Table contains contradictions, results can not be predicted

17.

Following state diagram shows the behavior of a feeding device:



Which of following statements about state diagram is correct?

- A 100% 3-switch coverage can not be reached since state diagram contains only 3 states.
- B More test cases are required to reach 100% state transition coverage than to reach 100% state coverage.
- C One single test case is enough to reach 100% 0-switch coverage.
- D If test cases are designed by using a state transition tree, then 3 test cases are required.

18.

Exploratory testing is often used in practice.

Which two of following statements about exploratory testing are correct?

- A During exploratory testing no test logs will be created. Thereby valuable time can be spared.
- B During exploratory testing prior defined test cases will be executed within an iterative process.
- C During exploratory testing bugs can be brought to light that could not be found by systematic testing.
- D When applying exploratory testing, time pressure is so high that testing could be executed without defining test objectives.

E Application knowhow of the test team has a great influence on the efficiency of exploratory testing.

19.

Which of the following statements about risk management is most appropriate?

- A** Risks that have not been identified during risk identification are to be considered on occasion.
- B** Possible reactions to an identified risk among others: inaction, or creating an emergency plan.
- C** Risks that could cause a big damage should be handled with high priority.
- D** Since the results of a quantitative risk analysis are numerical, these are more precise than the results of a qualitative analysis.

20.

You are charged with testing a bank application. Following requirements (account and interest rates) are defined for the „money transaction“ function:

- If a customer is authorized overdrawing his credit (up to a defined credit limit) and gets his account balance
 - negative, but within his credit limit, he will be charged with an interest of 1.5%
 - less than his credit limit (credit overlapping), he gets charged with 50 EUR
- If a customer is not authorized overdrawing his credit (up to a defined credit limit) and his account balance gets negative, then he will be charged with 35 EUR

Following test cases have been identified:

- A. Customer A is authorized to overdraw his credit limit by 2000 EUR and has an account balance of 250 EUR. He draws 1000 EUR.
- B. Customer B is not authorized to overdraw his credit limit and has an account balance of 250 EUR. He draws 1000 EUR.
- C. Customer C is authorized to overdraw his credit limit by 1500 EUR and has an account balance of -650 EUR (it means that credit limit has been overdrawn by 650 EUR). He draws 1000 EUR.
- D. Customer D is not authorized to overdraw his credit limit and has an account balance of -1000 EUR (it means that credit limit has been overdrawn by 650 EUR). He draws 1000 EUR.
- E. Customer E is authorized to overdraw his credit limit by 3000 EUR and has an account balance of -3200 EUR (it means credit limit has been overdrawn by 3200 EUR). He draws 1000 EUR.
- F. Customer F is authorized to overdraw his credit limit by 1500 EUR and has an account balance of 0 EUR. He draws 1000 EUR.
- G. Customer G is not authorized to overdraw his credit limit and has an account balance of 1200 EUR. He draws 200 EUR.
- H. Customer H is authorized to overdraw his credit limit by 1500 EUR and has an account balance of 4500 EUR. He draws 1000 EUR.

By which of following test scenarios can you reach a 100% equivalence class coverage with a minimum number of test cases?

- A** C, D, F, G and H
- B** C, D, E and G
- C** A, B, C, D, E, F, G and H.
- D** A, C, D, F, G and H.