

# Latest Version: 6.0

## Question: 1

Suppose the following test objectives are specified in a project:

TO-1) validate the business workflows.

TO-2) verify whether all system interfaces exist as specified.

TO-3) validate that the system corresponds to the needs of different user profiles.

TO-4) verify the correct implementation of input data ranges.

Which one of the following combinations between test objectives and MBT model subject and focus is correct?

Response:

- A. TO-3 requires a behavioral environment model.
- B. TO-2 requires a behavioral test model.
- C. TO-4 requires a structural environment model.
- D. TO-1 requires a structural system model.

**Answer: A**

## Question: 2

Which one of the following statements is a typical combination of test selection criteria for an MBT model?

Response:

- A. Transition coverage on business process models
- B. Path coverage on structural models.
- C. Transition pair coverage on state diagrams.
- D. Gateway coverage on textual models.

**Answer: C**

## Question: 3

Consider the following tools supporting the MBT modeling process. Which tool provides support for writing syntactically correct MBT models?

Response:

- A. All of the above.
- B. Domain-specific language editor.

- C. State/transition diagram editor
- D. UML modeling tool.

**Answer: A**

### Question: 4

A company decided to use MBT for acceptance testing of a transport ticketing system. Which one of the following metrics would a test manager use to best measure the progress of MBT activities?

Response:

- A. The number of requirements managed and traced in the MBT model, and requirements coverage (percentage) by generated test cases
- B. The number of bugs discovered in the component testing phase.
- C. The effort (in person-days) spent on developing test models and applying test selection criteria.
- D. The effort (in person-days) done for code development.

**Answer: A**

### Question: 5

Does it make sense to have test equipment information in the MBT model?

Response:

- A. No. The test case generator will not understand the information and, thus, will not generate any test cases from the MBT model.
- B. Yes. It helps the test manager to create a test suite with all tests requiring specific equipment.
- C. No. It blows up the MBT model without providing helpful information.
- D. Yes. Without this information, testers will never be able to specify the tests correctly.

**Answer: B**

### Question: 6

An MBT approach is used for a hospital management software project at the system testing level. A test management tool and a test automation framework are used in the project. The requirements are stored in a spreadsheet.

Which one of the following statements regarding MBT tool integration describes good practice in the given project context?

Response:

- A. The MBT tool exports the generated test cases to the test management tool.

- B. To generate automated test scripts for the test automation framework, both tools should be purchased from the same vendor.
- C. The test automation framework automatically mirrors the test results back into the model.
- D. Requirements are specified in the MBT tool and synchronized with the test management tool.

**Answer: A**

### Question: 7

An MBT approach is deployed in a project. Which one of the following statements describes good practice?

Response:

- A. For projects applying continuous integration, MBT should be used for higher test levels only (system testing, user acceptance testing).
- B. Deploying MBT with manual test execution requires additional risk management.
- C. Establishing traceability between requirements and MBT model elements is part of an MBT approach.
- D. Configuration management does not have to cover the MBT models, if the generated test cases are controlled.

**Answer: C**

### Question: 8

Why do we need new approaches to testing?

Response:

- A. Testing projects have to cope with increasing industrial demands regarding time-to-market and cost reduction.
- B. Classic test design techniques such as boundary value analysis are incompatible with agile approaches.
- C. New technologies always require new tools and, thus, new approaches to testing.
- D. By definition, new approaches are better and there is no reason not to use them.

**Answer: A**

### Question: 9

Suppose a project team is using use case diagrams for business analysis. Now the project manager proposes model-based testing to improve testing.

Which one of the following statements is the best analysis made by the project manager related to the impact of MBT on requirements engineering (RE) activities?

Response:

- A. RE activities will change. The requirements analysis activity is not required anymore, because MBT analysis and design is sufficient to analyze the requirements.
- B. RE activities will not change. The major impact is that MBT models are replacing system development models.
- C. RE activities will not change. The major impact on RE is the fact that MBT models will support validation of requirements by modeling the system from a testing perspective.
- D. RE activities will not change. The major impact is that requirements analysis is now performed by the skilled MBT analyst replacing the business analyst.

**Answer: C**

### Question: 10

An MBT approach is used in a project. Which statement below regarding MBT activities is most correct?

Response:

- A. MBT models reflect the system requirements, but do not consider the project test objectives.
- B. MBT modeling activities should start as soon as possible, but not before having finished the detailed system design.
- C. Test selection criteria are used to drive test generation from the MBT model.
- D. MBT activities in a test process should follow a strictly sequential order.

**Answer: C**