

# UKTB Advanced Exam Guidance



## Foreword

The following text is an extract from the ISTQB Advanced Exam guidelines. It should provide sufficient information for anyone taking the Advanced exams to understand the structure and the changes to the question types.

## The exam structure

65 multi-choice questions.  
2 hours to complete the exam.  
Each question has a value of 1, 2 or 3 marks.  
Total available marks are 100; the pass mark is 65 marks.

Question values -

K2 questions are worth 1 mark each.  
K3 questions are worth 2 marks each.  
K4 standard questions are worth 2 marks each.  
K4 complex questions are worth 3 marks each.

The breakdown of the exam is as follows:-

60% K2 (39 questions);  
25% K3/K4 standard (16 questions);  
15% K4 complex (10 questions).

## PICK 'N' MIX

In addition to the standard multi-choice question styles used in the ISTQB Foundation exam, the Advanced exam has introduced PICK 'N' MIX questions.

The PICK 'N' MIX question type consists of a stem (question) followed by a list of options (minimum 5). The candidate is asked to pick 2 or 3 of the options listed. It should be specified whether 2 or 3 options have to be selected!

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An example PICK 'N' MIX question:

## *Sample Pick N Set*

- |                                      |   |
|--------------------------------------|---|
| A. Calcium                           | G. Vitamin B <sub>6</sub>                   |
| B. Fluoride                          | H. Vitamin B <sub>12</sub> (cyanocobalamin) |
| C. Folic acid                        | I. Vitamin C                                |
| D. Iron                              | J. Vitamin D                                |
| E. Vitamin A                         | K. Vitamin E                                |
| F. Vitamin B <sub>1</sub> (thiamine) |   |

*For each child, select the appropriate vitamin or mineral supplements.*

1. A 1-month-old infant is brought to the physician for a well-child examination. He has been exclusively breast-fed, and examination shows normal findings. (SELECT 2 SUPPLEMENTS). **Ans: B, J**
2. A 6-year-old girl has cystic fibrosis. She has been taking no medications. (SELECT 3 SUPPLEMENTS). **Ans: E, J, K**

## Scenario Questions

For all K4 questions scenarios will be used to give background and enable analysis to answer the questions. Note that K2 and K3 questions may also be based on scenarios.

### Scenario Construction Guidelines

A scenario is constructed to provide context for one or more questions. It should contain:

1. All the information needed to answer the questions associated with it either directly or by inference.
2. It may contain superfluous information to provide candidates with an opportunity to select what is relevant.
3. It should not contain distracting material designed to confuse or overwhelm the candidate.
4. Each scenario should be written with particular questions in mind but may need to be revised as questions are developed.
5. A scenario contains contextual information for K4 questions; it may also support K1 – K3 questions. For example, a scenario could provide a context for selection of suitable test strategy headings as a K4 question. Within the same context, a question could be set on the practical application of (say) state transition testing. This question could be at K3 level by avoiding any need to analyse the context, either by including all the necessary information within the question itself or by providing the necessary information in the scenario directly (i.e. not requiring the use of inference).

The following contextual information should be given as necessary:

- **Persona:** Roles or concrete Persons involved in the scenario, including their knowledge, communicative and behavioral peculiarities. Special care must be taken to avoid

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implying discrimination by gender, by age, of ethnic minorities, of social groups, and of handicapped people.

- Location: Real or imaginary location, where the scenario takes place, including aspects such as open-plan office, IT and telecommunication infrastructure including software licenses, etc.
- Situation: Give all information needed by the candidate to imagine the situation of the primary actor, especially all constraints regarding schedule, remaining time, budget, resources, methods, techniques, etc.
- Goals: Express explicitly the goals the persona has; maybe refined into sub-goals. The goals of the primary actor should be clearly stated either in the scenario or in the questions based on the scenario, and should remain clear irrespective of the answers the candidate chooses.

An example scenario (not directly related to the syllabus):

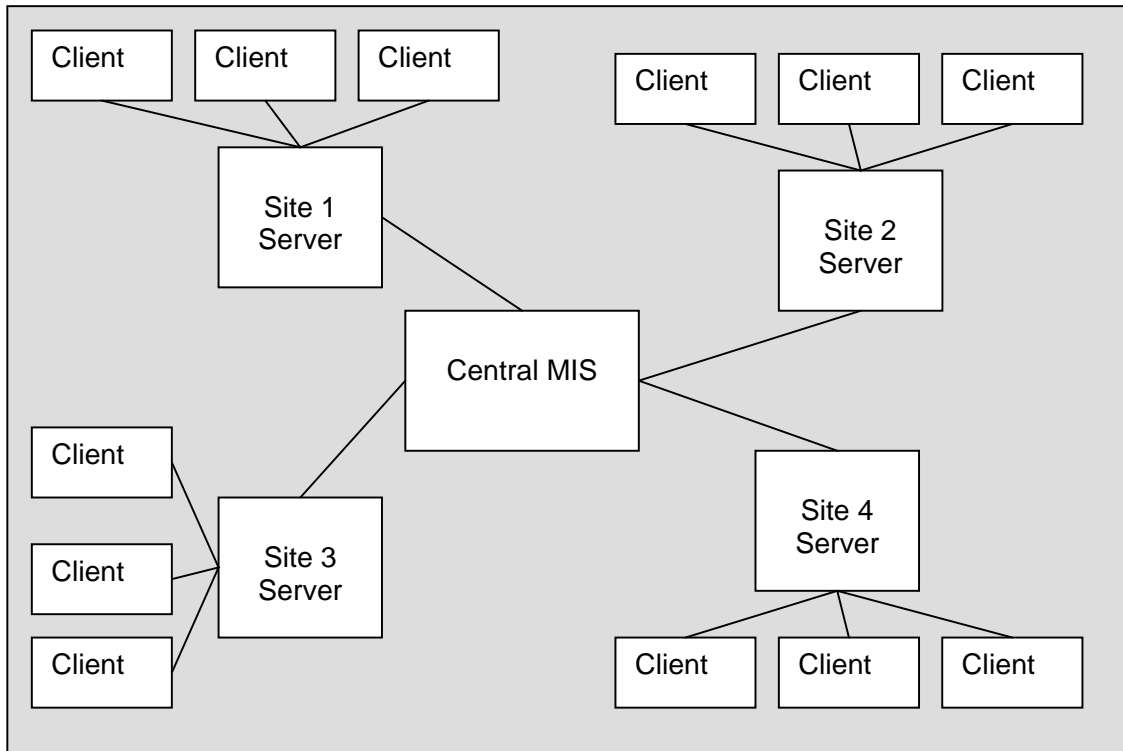
## **Scenario (“Purchasing System”)**

A major retail operation has a purchasing system with a number of distributed purchasing centres (sites in Figure 1). A central Management Information System (MIS) consolidates inventory levels and purchasing needs and generates management reports. The purchasing centre site servers upload their data regularly using batch processing, having collected data from individual departments within the site (clients in Figure 1). Management reports are prepared from the central MIS database daily. The MIS is not interrogated in real time although the reports generated are never more than a day old.

The number of purchasing centre sites is expected to triple over the next 5 years as a result of mergers and acquisitions. The existing system architecture is not coping with the existing load and a major upgrade is planned to triple its capacity to cope with the extra demand and also to enhance the MIS.

A draft test strategy is in place for the upgrade project. None of the testing team members have experience in using automated tools and the current test library contains no automated scripts.

The project team is using the V model and the test strategy uses 4 levels of testing: component, integration, system and user acceptance testing. Each level has a level test plan.



**Figure 1- Diagram of the Purchasing System Architecture**

1. Look at the following list of tools **[K4]**:

- a. Incident management tool.
- b. Instrumenter.
- c. Configuration management tool.
- d. Test driver.
- e. Static Analyzer.

Which options would be the most effective combination for use at the system test level for the project in Scenario (“Purchasing System”)?

- A. a and c.
- B. b and e.
- C. c and e.
- D. a and d.

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Correct answer is **A**

As Test Manager for the project you want to introduce the idea of 'end to end' testing, by which you mean exercising the system from the beginning to the end of a set of business scenarios. This is not a new system, so some of the business scenarios have already been tested and will not change.

2. The following tests have been suggested as elements of a test strategy for Scenario ("Purchasing System") [K4]:

Which of the following options represents **the best selection** of strategy elements in this case?

- a. End to end testing.
  - b. MIS new functionality testing.
  - c. MIS regression testing.
  - d. Site server functionality.
  - e. Volume and load testing across the network.
  - f. Recovery testing of batch uploads.
- 
- A. a, b and f.
  - B. c, e and f.
  - C. a, b and c.
  - D. d, e and f.

Correct answer is **C**