

Exam requirements

Tmap® Next Foundation (TMPF.EN)

Publication date	1-6-2008
Start date	1-7-2007
Target group	The module is primarily intended for (junior) professional testers with six months to one year of work experience in the testing field. The module is also suitable for users, developers and managers who test information systems and software products.
Prerequisites	General knowledge in the field of system development
Exemption	None
Examination session	Referral to literature and notes is not permitted

Exam requirements	Weight (%)
1. Framework and importance of testing	15
2. TMap® life cycle acceptance and system testing	40
3. Development testing	5
4. Test design	40

Specification of the exam requirements

1. Framework and importance of testing	1.1	Structured testing The candidate is familiar with the various test terms.
	1.2	The essentials of TMap® The candidate is familiar with the four essentials of TMap®.
2. TMap® life cycle acceptance and system tests	2.1	TMap® test management phases The candidate has knowledge of the Planning, Managing and Setting up and maintaining infrastructure phases.
	2.2	TMap® test implementation phases The candidate understands the Preparation, Specification, Execution and Completion phases.
3. Development testing	3.1	Aspects of development testing The candidate has knowledge of development testing.
4. Test Design	4.1	Basic and test design techniques The candidate understands the basic techniques and test design techniques and can apply them.

Basic concepts

- 1. Framework and importance of testing
- 1.1 Structured testing
 - acceptance test
 - corrective measures
 - detective measures
 - development tests
 - dynamic explicit testing
 - dynamic implicit testing
 - evaluation
 - key Performance Indicators (KPIs)
 - preventive measures
 - quality
 - quality assurance
 - quality attribute
 - quality guarantee
 - quality management
 - regression
 - regression test
 - requirements
 - static testing
 - structured testing
 - system test
 - test basis
 - test benefits
 - test format
 - test image
 - test type
 - test object
 - test professional
 - testing
 - unstructured testing
 - v-model
- 1.2 The essentials of TMap®
 - acceptance testing
 - adaptive
 - budget
 - business case
 - business-driven
 - business-driven test management (BDTM)
 - characteristic
 - completion phase
 - costs
 - critical path
 - defects
 - test design
 - development testing
 - essentials

execution phase
infrastructure
inspection
IT governance
life cycle model
management of the total testing process phase
management phase
master test plan (MTP)
metrics
organization
permanent test organization
planning of the total testing process phase
planning phase
preparation phase
product risk
product risk analysis
result
review
risk
risk class
set-up and management infrastructure phase
specification phase
structured testing process
sub-object
system testing
techniques
test objective
test environment
test policy
test professional
test roles
test strategy
test tools
time
toolbox
walkthrough
workstations

- 2. TMap® life cycle acceptance and system testing
- 2.1 TMap® test management phases
 - acceptance testing
 - business-driven test management (BDTM)
 - capacity to integrate
 - completeness
 - connectivity
 - continuity
 - correctness
 - demotion option
 - economy
 - fallback option

flexibility
functionality
heuristic evaluation
information security
infrastructure
iteration model
load
load model
maintainability
manageability
management phase
measurement plan
operational safety
performance
planning phase
portability
quality attribute
regression
regression testing
restorability
reusability
risk
robustness
security
set-up and management infrastructure phase
stress
suitability (infrastructure)
system testing
test environment
test format
test infrastructure coordinator
test manager
test plan
test tool
testability
tools for conducting the test
tools for debugging and analyzing the code
tools for designing the test
tools for planning and managing the test
usability
duplicated
user-friendliness
verifiability
workstations

2.2

TMap® test implementation phases
acceptance testing
alternative test basis
basic situation
central basic situation

checklist
completion phase
testware conservation
defect
defect report
detailed review
dynamic explicit testing
dynamic implicit testing
testing process evaluation
evaluation
execution phase
logical test case
physical test case
preparation phase
pretest
priority
prototype
detailed review report
requirements
retesting
seriousness
specification phase
static testing
system testing
test basis
test object review
test type
test script
test situation
test unit
testability
testware

3
3.1
Development testing
Aspects of development testing
build & deploy scripts
development testing
eXtreme Programming
SCRUM
test framework
test harness
unit integration test (UIT)
unit test (UT)

4
4.1
Test design
Basic and test design techniques
basic situation
basic technique
boundary value analysis
checklist

condition coverage
condition/decision coverage
coverage
coverage level
coverage type
CRUD
data combination test (DCT)
data cycle test (GCT)
decision coverage
decision points
decision table test (BTT)
elementary comparison test (EVT)
equivalence classes
error guessing (EG)
exploratory testing (ET)
good paths/bad paths
load profiles
logical test case
modified condition/decision coverage
multiple condition coverage
neutral value
n-wise testing
operational profiles
orthogonal arrays
pair-wise testing
paths
physical test case
process cycle test (PCT)
quality attribute
real-life test (RLT)
semantic test (SEM)
syntactical test (SYN)
test case
test depth level N
test design technique
test format
test script
test situation
use case test (UCT)

Literature

Literature

Koomen, T., Aalst, L. van der, Broekman, B., Vroon, M.

TMap® Next, for result-driven testing

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Overview of the literature

Examspecification	Literature ^a
1.1	A: Chapter 2 A: §8.6.1 - §8.6.3
1.2	A: Chapter 3
2.1	A: §2.1, §2.3.5 A: §3.2.2 A: §6.1 - §6.4 ^b A: §8.4.2, §8.5.1 - §8.5.4 A: Chapter 10
2.2	A: §2.3.2, §2.3.3 A: §3.2.2 A: §6.5 - §6.8 A: §12.1 - §12.3
3.1	A: §2.3.4 A: §3.2.3 A: §7.1 - §7.2.6
4.1	A: §6.6.1 A: Chapter 14 ^c

Justification of choices

^A No questions will be asked about the contents of framed text blocks, except for framed text blocks that contain definitions and the framed text blocks in chapter 14. The contents of these framed text blocks are part of the exam.

^B Only the paragraphs 6.2, 6.3 and 6.4 are part of the exam. Their subparagraphs (6.2.x, 6.3.x and 6.4.x) are not part of the exam.

^C No questions will be asked about the derivation of orthogonal arrays (14.3.5).