INTRODUCTION TO ISTQB

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AGENDA

- INTRODUCTION
- FOUNDATION
- ADVANCED
- PREPARATION
- SAMPLE QUESTIONS

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HISTORY

- International Software Testing Qualifications Board (ISTQB)

- Established in Edinburgh Scotland in November 2002

- More than 100k certifications

- Comprise of 45+ countries testing board

- Current President: Yaron Tsubery from Israel

ISTQB
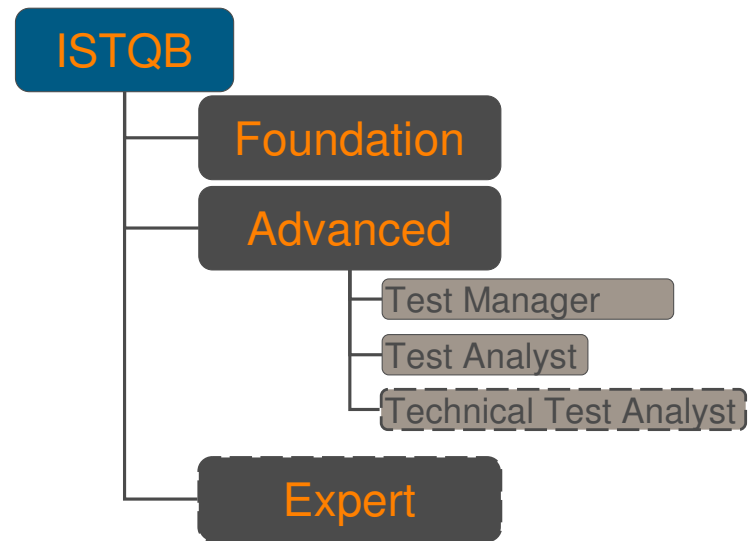International Software Testing Qualifications Board

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VISION

- To provide a standard framework for the development of tester careers

- To be able to compare testing skills across different countries

- Testers would be able to move across country borders more easily

- Less cultural bias in the qualification

ISTQB
International Software Testing Qualifications Board

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LEARNING OBJECTIVE

- K1: Remember
- K2: Understand
- K3: Apply
- K4: Analyze
- K5: Synthesize
- K6: Evaluate

FOUNDATION: ASSESSMENT

- Fundamentals of Testing
- Testing throughout the software life cycle
- Static techniques
- Test design techniques
- Test management
- Tool support

FOUNDATION: EXAM

- 40 Questions in Total
- Breakdown
  - 50% K1 (20 questions)
  - 30% K2 (12 questions)
  - 20% K3 (8 questions)
- Question Value
  - Every question worth one mark each
  - No negative for wrong answer
- Pass Marks 65% (26 questions)

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FOUNDATION: EXAM

- Type of exam: On-line

- Duration: 60 minutes

- Pre-requisite: None

- Type of question: Multiple Choices

- Cost: 130 GBP (VAT Exclusive)

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ADVANCED: LEVELS

- Test Manager
  - Risk-based test
  - Testing processes
  - Improving test process
  - Test team development

- Test Analyst
  - Behavioral and experienced-based testing
  - Risk-based testing
  - Testing standards
  - Business-oriented testers

- Technical Test Analyst
  - Advanced test automation
  - Structural testing
  - Non-functional testing
  - Technical-oriented testers and programmers

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ADVANCED: ASSESSMENT

- Basic Aspects of Software Testing
- Testing Processes
- Test Management
- Test Techniques
- Reviews
- Incident Management
- Standard & Test Improvement Process
- Test Tool & Automation
- People Skills

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ADVANCED: EXAM

- 65 Questions in Total

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

- 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.

- Pass Marks 65%

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ADVANCED: EXAM

- Type of exam: Paper

- Duration: 3 hours

- Pre-requisite: Certified Foundation and 5 years experience in software engineering or 3 years if holds bachelor degree in engineering

- Type of question: Multiple Choices

- Cost: 180 GBP (VAT Exclusive)

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PREPARATION

- Before Exam
  - Always read syllabus thoroughly
  - Practice with sample questions
  - Read certified books
  - Attend accredited training providers

- During Exam
  - Keep the watch
  - Able to go back to change answers
  - Use the mark for unsure answers

- After Exam
  - Foundation (on-line) will know result immediately
  - Advance will take around a month

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PROCESS AND FEE

- Register via BCS for on-line foundation exam

- Require public exam registration for advanced level

- Fee
  - Late Cancellation (7-14 days notice) 50% of examination fee
  - Late Cancellation (less than 7 days notice) 100% of examination fee

PASS RATE

Bar chart with values: Foundation 80, Advanced Test Manager 61, Advanced Test Analyst 72, ISEB Practitioner (old) 50.

Legend:
- Foundation
- Advanced Test Manager
- Advanced Test Analyst
- ISEB Practitioner (old)

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- SAMPLE QUESTION

SAMPLE QUESTION

- Testing should be stopped when:
  - a) all the planned tests have been run
  - b) time has run out
  - c) all faults have been fixed correctly
  - d) both a) and c)
  - e) it depends on the risks for the system being tested

SAMPLE QUESTION

- Given the following code, which is true about the minimum number of test cases required for full statement and branch coverage:

```
Read P
Read Q
IF P+Q > 100 THEN
Print "Large"
ENDIF
If P > 50 THEN
Print "P Large"
ENDIF
```

a) 1 test for statement coverage, 3 for branch coverage

b) 1 test for statement coverage, 2 for branch coverage

c) 1 test for statement coverage, 1 for branch coverage

d) 2 tests for statement coverage, 3 for branch coverage

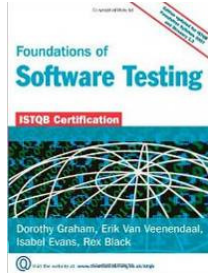e) 2 tests for statement coverage, 2 for branch coverage

SAMPLE QUESTION

- The difference between re-testing and regression testing is

    a) re-testing is running a test again; regression testing looks for unexpected side effects

    b) re-testing looks for unexpected side effects; regression testing is repeating those tests

    c) re-testing is done after faults are fixed; regression testing is done earlier

    d) re-testing uses different environments, regression testing uses the same environment

    e) re-testing is done by developers, regression testing is done by independent testers

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SAMPLE QUESTION

- Consider the following types of tools:

  V. Test management tools

  W. Static analysis tools

  X. Modeling tools

  Y. Dynamic analysis tools

  Z. Performance testing tools

- Which of the following of these tools is most likely to be used by developers?

  a) W, X and Y

  b) V, Y and Z

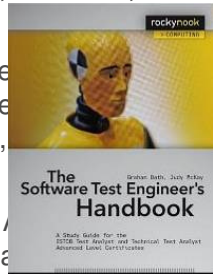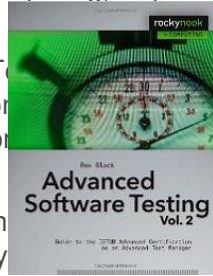 c) V, W and Z

  d) X, Y and Z

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BOOKS: FOUNDATION

- Foundations of Software Testing: ISTQB Certification by Dorothy Graham, Erik Van Veenendaal, Isabel Evans, Rex Black, Paperback, Jan 2008, ISBN 1844809897

BOOKS: ADVANCED

- Advanced Software Testing - Vol. 1: Guide to the ISTQB Advanced Certification as an Advanced Test Analyst by Rex Black, Rockynook Computing, Paperback, Oct 2008, ISBN: 1

- Advanced Software Testing - Vol. 2: Guide to the ISTQB Advanced Certification as an Advanced Test Manager by Rex Black, Rockynook Computing, Paperback, ISBN: 1

- The Software Test Engineer's Handbook: A Study Guide for the Test Analyst and Technical Test Analyst Advanced Level Certificates by Graham Bath & Judy McKay, Rockynook Computing, Paperback, Jul 2008, ISBN 1933952245

REFERENCE

- http://www.bsc.org/iseb
- http://www.istqb.org
- http://www.uktb.org.uk

CONCLUSION

- ISTQB is an international organization certified testers around the world

- Provide full syllabus freely

- Certificate is evolving and improving every day

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