SESSION PLAN

Course: ISTQB AL- TA Certification Training
Objectives: On completion of this course delegates will be able to: - Successfully clear the ISTQB AL - TA Exam

Intended Audience: The Advanced Level Test Analyst qualification is aimed at people who have achieved an advanced point in their careers in software testing. This includes people in roles such as test consultants, test analyst.

Session plans

Start and end times are approximate only and provided as a guide. It is less important to be precise in each session, as long as the overall programme is not affected. Where experience shows that certain topics can be compressed while others often need expanding, this is included. However, each course is different in its dynamics and the lecturer should adjust as required.

Day 1 – Chapter 1 Covered

Date	Time	Topic	Learning Objective
Day 1 – Chapter 1	15 mins	Course Introduction	– About ISTQB – AL - TA – Why ISTQB – AL - TA – Exam Pattern – Standardized Approach for the Course
Day 1 – Chapter 1	3 Hour	Brief Recap of ISTQB FL Concepts With special focus on Chapter 2,4	–
Day 1 – Chapter 1	1 Hour	Testing in the Software Development Lifecycle	– Explain how and why the timing and level of involvement for the Test Analyst varies when working with different lifecycle models
Day 1 – Chapter 1	30 mins	Test Monitoring, Planning and Control	– Summarize the activities performed by the Test Analyst in support of planning and controlling the testing
Day 1 – Chapter 1	30 mins	Test Analysis	– Analyze a given scenario, including a project description and lifecycle model, to determine appropriate tasks for the Test Analyst during the analysis and design phases
Day 1 – Chapter 1	30 mins	Test Design	– Explain why test conditions should be understood by the stakeholders – Analyze a project scenario to determine the most appropriate use for low-level (concrete) and high-level (logical) test cases
Day 1 –	30 mins	Test Implementation	– Describe the typical exit criteria for test analysis and test design and explain how

Chapter 1			meeting those criteria affect the test implementation effort
Day 1 – Chapter 1	30 mins	Test Execution	– For a given scenario, determine the steps and considerations that should be taken when executing tests
Day 1 – Chapter 1	30 mins	Evaluating Exit Criteria and Reporting	– Explain why accurate test case execution status information is important
Day 1 – Chapter 1	30 mins	Test Closure Activities	– Provide examples of work products that should be delivered by the Test Analyst during test closure activities

Day 2 - Chapter 2

Session No.	Time	Topic	Learning Objective
Day 2 - Chapter 2	30 mins	Test Management: Responsibilities for the Test Analyst	– Explain the types of information that must be tracked during testing to enable adequate monitoring and controlling of the project
Day 2 – Chapter 2	30 mins	Distributed, Outsourced and Insourced Testing	– Provide examples of good communication practices when working in a 24-hour testing environment
Day 2 – Chapter 2	1 Hour	The Test Analyst's Tasks in Risk-Based Testing . - Overview - Risk Identification . - Risk Assessment . - Risk Mitigation.	– For a given project situation, participate in risk identification, perform risk assessment and propose appropriate risk mitigation
Day 2 – Chapter 3	6 Hours	Test Techniques - Specification-Based Techniques - Equivalence Partitioning . - Boundary Value Analysis - Decision Tables . - Cause-Effect Graphing . - State Transition Testing	- Explain the use of cause-effects graphs - Write test cases from a given specification item by applying the equivalence partitioning test design technique to achieve a defined level of coverage - Write test cases from a given specification item by applying the boundary value analysis test design technique to achieve a defined level of coverage - Write test cases from a given specification item by applying the decision table test design technique to achieve a defined level of coverage - Write test cases from a given specification item by applying the state transition test design technique to achieve a defined level of coverage - Write test cases from a given specification item by applying the pairwise test design technique to achieve a defined level of coverage

Day 3 – chapter 3 continuation and completed, Chapter 4 Begin

Day 3 – Chapter 2 Continuation	3 Hours	Test Techniques – Specification Based-Based Techniques (Continuation) - Combinatorial Testing Techniques - Use Case Testing - User Story Testing . - Domain Analysis	- Write test cases from a given specification item by applying the classification tree test design technique to achieve a defined level of coverage - Write test cases from a given specification item by applying the use case test design technique to achieve a defined level of coverage - Explain how user stories are used to guide testing in an Agile project - Write test cases from a given specification item by applying the domain analysis test design technique to achieve a defined level of coverage – Analyze a system, or its requirement specification, in order to determine likely types of defects to be found and select the appropriate specification-based technique(s)
Day 3 – Chapter 2 Continuation	2 Hours	Test Techniques - Defect-Based Techniques - Using Defect-Based Techniques - Defect Taxonomies	- Describe the application of defect-based testing techniques and differentiate their use from specification-based techniques - Analyze a given defect taxonomy for applicability in a given situation using criteria for a good taxonomy
Day 3 – Chapter 2 Continuation	2 Hour	Test Techniques -Experience-Based Techniques - Error Guessing - Checklist-Based Testing . - Exploratory Testing	- Explain the principles of experience-based techniques, and the benefits and drawbacks compared to specification-based and defect-based techniques - For a given scenario, specify exploratory tests and explain how the results can be reported - For a given project situation, determine which specification-based, defect-based or experience-based techniques should be applied to achieve specific goals
Day 3 – Chapter 4 Begin	1 Hour	Testing Software Quality Characteristics	- Explain by example what testing techniques are appropriate to test accuracy, suitability, interoperability and compliance characteristics - For the accuracy, suitability and interoperability characteristics, define the typical defects to be targeted

Day 4 – Chapter 4 continued, chapter 5,6,7covered

Day 4 – Chapter 4 completed	1 Hour	Testing Software Quality Characteristics	- For the accuracy, suitability and interoperability characteristics, define when the characteristic should be tested in the lifecycle - For a given project context, outline the approaches that would be suitable to verify and validate both the implementation of the usability requirements and the fulfillment of the user's expectations
Day 4 Chapter 5	1 Hours	Introduction to Reviews – Types of Reviews, benefits, Success factors for reviews	– Explain, using examples, why it is important to review the work products - Explain why review preparation is important for the Test Analyst

Day 4 Chapter 5	1 Hour	Using Checklists in Reviews - - Requirement oriented checklist - use case oriented checklist - user stories oriented checklist	- Analyze a use case or user interface and identify problems according to checklist information provided in the syllabus - Analyze a requirements specification or user story and identify problems according to checklist information provided in the syllabus
Day 4 Chapter 6	3 Hour	Defect Management - IEEE 1028 std for incident management - When Can a Defect be Detected - Defect Report Fields (IEEE 829 incident report fields) - Defect Classification - Root Cause Analysis	- IEEE 1044, IEEE 829 template - Explain how phase containment can reduce costs - Explain the information that may be needed when documenting a non-functional defect - Identify, gather and record classification information for a given defect - Explain the purpose of root cause analysis
Day 4 Chapter 7	2 Hours	Test Tools and Automation	- Explain the benefits of using test data preparation tools, test design tools and test execution tools - Explain the Test Analyst's role in keyword-driven automation - Explain the steps for troubleshooting an automated test execution failure