

**General**

<b>Author</b>	Thomas Müller
<b>Date Submitted</b>	8-Jan-10 (reworked 11-Jan-2010)
<b>Reviewer</b>	Mette Bruhn-Pedersen / Hans Schaefer
<b>Date Reviewed</b>	9-Jan-10 / 11-Jan-10

**(Non-Scenario) Conventional MC (Type A) Question**  
 Description part

<b>ID</b>	CTFL-LO-1.2.3_Q1_K2
-----------	---------------------

<b>Question (stem)</b>	Which one of the following describes best the difference between testing and debugging?
<b>Correct Answer</b>	<b>A.</b> Testing shows failures that are caused by defects. Debugging finds, analyzes, and removes the causes of failures in the software.
<b>Distracters</b>	<b>B.</b> Testing pinpoints the defects. De bugging analyzes the faults and proposes preventing activities.  <b>C.</b> Testing removes faults. Debugging identifies the causes of failures.  <b>D.</b> Dynamic testing prevents causes of failures. Debugging removes the failures.
<b>Justification for Correct Answer</b>	This is a true false question that requires a clear understanding of the different activities for getting rid of a wrong behavior of the application. <ol style="list-style-type: none"> <li>1. It starts with the observation that an observed behavior is wrong (=the failure), writing down the context where the failure can be observed,</li> <li>2. Pinpointing the failure, in order have as much information about the behavior by using different data, different options, testing variants of the failed tests, and</li> <li>3. The analyzing the code in order to find the wrong peace of software, and then remove it.</li> </ol> <p>A good tester does pinpointing                  When a defect is reported from field use, developers may do then pinpointing.                  Wrong is in B: Debugging is not proposing preventive actions.                  Wrong is in C: Testing does not remove a fault                  Wrong is in D: Tester prevents not the cause of the failure, and developers do not remove the failure.</p>
<b>Partial Scoring</b>	No
<b>Syllabus Ref.</b>	Reference <a href="#">1.2 last paragraph</a>
<b>Learning Objective</b>	LO-1.2.3 Differentiate testing from debugging (K2)
<b>K-Level</b>	<input checked="" type="checkbox"/> K2, <i>Understand</i> <input type="checkbox"/> K3, <i>Apply</i> <input type="checkbox"/> K4, <i>Analyse</i>
<b>Reviewer Response</b>	Rejected with comments. I think the distracters are not obvious enough. TM: Analyzed proposed changes and worked in changes.