

**CMIS 211 Application Programming**  
Institutional Challenge Exam (ICE)  
Liberty University Online

**Test Content**

- Visual Basic programming language
- Problem solving
- Sequential programming
- Control loops
- Arrays
- Software development
- Software testing
- Software debugging

**Study Guide**

Deitel, Harvey M., & Deitel, Paul J. Visual Basic 2008 How to Program. Upper Saddle River, NJ: Prentice Hall, 2008. ISBN: 013605305X

Deitel, Harvey M., & Deitel, Paul J. Simply Visual Basic 2008: An Application-Driven Tutorial Approach. 3<sup>rd</sup> ed. Upper Saddle River, NJ: Prentice Hall, 2008. ISBN: 0136053033

**Sample Questions**

- 1) A Label's \_\_\_\_\_ determines the appearance of the Label's border.
  - a. BorderStyle
  - b. Border
  - c. Edge
  - d. Fixed3D
  
- 2) What is the message dialog icon containing the letter "i" typically used for?
  - a. To display information about the state of the application
  - b. To caution the user against potential problems
  - c. To ask the user a question
  - d. To alert the user to critical situations
  
- 3) Assume that intCounter is an Integer variable initialized to 3. Which of the following loop termination conditions can be used in a Do Loop Until statement to print the values 3 through 9, inclusive?.
  - a. intCounter > 9
  - b. intCounter < 10
  - c. intCounter < 9
  - d. intCounter >= 10
  - e. Both a. and d.

**Exam Details**

The exam is offered online, through Blackboard. The test has 100 questions and there is a 60 minute time limit to complete the exam. The exam must be completed in one sitting. A score of 70% or higher is required to pass the exam.

**Register for the Exam**

Go to [www.luonline.com/ice](http://www.luonline.com/ice) to register for the exam.