Internet & Computing Core Certification (IC3) Study Guide



# **NR Computer Learning Center**

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# Internet and Computing Core Certification (IC3) - Computer Basics Skills

Certiport's Internet and Computing Core Certification (IC<sup>3</sup>®) is an ideal certification for anyone who wants to **demonstrate critical computer and Internet skills** valued in today's academic and professional environments. It is the world's first certification program for **digital literacy**. IC<sup>3</sup> is the most commonly recognized standard of digital literacy today. IC<sup>3</sup> is both accepted for college credit by the American Council on Education (ACE) and aligned with the National Educational Technology Standards (NETS) for teachers and students from the International Society for Technology in Education (ISTE). Students and teachers who achieve IC<sup>3</sup> certification possess the validated skills and knowledge required for basic use of **computer hardware, software, networks, and the Internet**. Not only are they given tools for success in the 21st Century classroom but also for higher education, employment, and life.

To become IC<sup>3</sup> certified, you must pass the following three exams (each exam takes less than an hour to complete):

- Computing Fundaments: Computer Hardware, Computer Software, Using an Operating System
- Key Applications: Word, Excel, PowerPoint
- Living Online: Networks & Internet, Electronic Mail, Internet, Internet on Society

Each IC3 Exam:

- Number of Questions: 50-55
- Duration: 120 minutes
- Passing Score: 800/1000
- Type of Questions: Multiple choice, True/False, Simulation, matching and more.

# Computing Fundaments: Computer Hardware, Computer Software, Operating System

### **Input/Output Devices**

- Monitor
- Video Cards
- Keyboard
- Mouse
- Printer

### **Computer Parts**

- Motherboard
- Memory
  - Read Only Memory (ROM) BIOS
  - Random Access Memory (RAM)
  - Cache Memory
- Storage Systems
  - Disk Drive
  - Floppy Disk Drive
  - Hard Disk Drives
  - CD Drives
  - Flash Drive
  - Virtual Storage Systems

### Software Program

- Upgrading Your Software
- Operating Systems
- Application Program

### Starting the Computer

- □ Starting the Computer
- □ The Boot Routine
- Resetting the Computer
- □ Shutting Down the Computer

### **Operating System**

- □ Windows Operating System
- Unix & Mac OS

### Windows Desktop

- Navigating Within Windows
- Using the Start Button
- □ Selecting Items in the Start Menu
- Moving & Resizing a Window
- Using Scroll Bars
- Using Windows Help
- Starting Application Programs

- □ Using the Run Command
- Understanding Files and Folders
- □ What's on my Desktop?
- □ Using the My Computer Feature
- Using Windows Explorer

### File & Folder

- Creating Folders
- Changing the Folder
- Selecting File in a Folder
- Copying and Moving Files or Folders
- □ Viewing File or Folder Properties
- □ Finding Files
- Deleting Files & Folders
- Restoring a File or Folder
- Looking at the Recycle Bin
- Emptying the Recycle Bin

### Maintaining the System

- Computer Performance
- □ Increasing the Computer's Performance
- Troubleshooting the Problem
- Working with Hardware
- □ Installing New Hardware
- Taking Care of the Computer
- Replacing or Upgrading Equipment
- Using Taskbar
- Checking for Errors
- Defragmenting the Disk
- Cleaning Up the Disk

### Customization

- Using the Control Panel
- Customizing the Desktop Display
- □ Changing the Date & Time
- Customizing the Mouse
- Customizing the Keyboard
- Changing the Volume
- Changing Printer
- Printing Files
- Managing Application Programs
- □ Installing a New Program

### Sample Question:

### 1. The brain of a computer is:

- A. Random Access Memory or RAM
- B. Central Processing Unit or CPU
- C. Read Only Memory or ROM
- D. BIOS

### 2. Software is:

- A. A computer program
- B. A set of instructions
- C. Runs on an operating systems
- D. All of the above

### 3. One KB is equal to:

- A. The amount of RAM in every computer
- B. 1 billion bytes
- C. 1024 Bytes
- D. 1 thousand bytes

### 4. Which hard disk will be able to store more information?

- A. 24MB
- B. 2400KB
- C. 24Gig
- D. 240MB

### 5. Which file extensions indicate only graphics files?

- A. BMP and DOC
- B. JPEG and TXT
- C. TXT and STK
- D. BMP and GIF

### 6. Which Windows program do you use to manage files and folders?

- A. Windows Explorer
- B. Windows Accessories
- C. Microsoft Office
- D. Windows Control Panel

### 7. Which one of the following item is an INPUT device?

- A. Floppy Disk
- B. Keyboard
- C. Monitor
- D. Speakers

### 8. Which one of the following item is an OUTPUT device?

- A. Mouse
- B. Microphone
- C. Monitor
- D. Hard Disk

### 9. Which one of the following is used as a STORAGE device?

- A. CPU
- B. Headphones
- C. Flash Drive
- D. Modem

### 10. What does the CPU stand for?

- A. Company Processed Unit
- B. Computer Processing Unit
- C. Central Processing Unit
- D. None of the above

Answer: 1: B; 2: D; 3: C; 4: C; 5: D; 6: A; 7: B; 8: C; 9: C; 10: C

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# **Key Applications**

### Word 2010/2013

- □ Starting a New Document
- Opening an Existing Document
- Closing a Document
- Entering and Editing Text
- Switching Between Documents
- Saving Files in Different Formats
- Managing Your Files
- Selecting Text
- Adjusting the Zoom
- □ Using Cut, Copy and Paste
- □ Formatting Text Characters
- □ Using the Format Painter
- Aligning Text left, center, right
- Adding Borders and Shading
- Adding Bullets and Numbering
- □ Checking the Spelling and Grammar
- Using the Thesaurus
- Using Find & Replace
- Changing the Line Spacing
- Setting the Paragraph Spacing
- □ Changing the Paper Size
- Changing Margins
- Adding Special Characters
- □ Inserting the Date and Time
- Previewing the Document
- Printing a Document
- Adding Page Numbering
- Inserting Pictures
- Manipulating Pictures
- Drawing Objects
- □ Inserting Text Boxes
- Editing Drawing Objects
- Arranging Drawing Objects

### Excel 2010/2013

- □ Creating a New Workbook
- Opening a Workbook
- Closing a Workbook
- Saving a Workbook
- Entering Data in the
   Workshoot
  - Worksheet
- Moving Around the Worksheet
- □ Selecting Cells
- Making Changes to the Contents
- Using Undo, Redo, or Repeat
- Copying and Moving Data
- Using AutoFill
- Changing the Column Widths
- Adjusting the Row Height
- □ Inserting or Deleting Rows, Columns, or Cells
- Managing Worksheets
- Creating Simple Formulas
- Using Common Built-In Functions
- □ Worksheet
- Formatting Numbers and Decimal Digits
- □ Changing Cell Alignment
- Changing Fonts and Sizes
- Applying Cell Borders
- Applying Colors and Patterns
- Using Styles
- Using the Format Painter
- □ Using the Spell Checker
- Sorting Data
- Using Print command
- Previewing the Worksheet
- Printing the Worksheet

### **PowerPoint 2010/2013**

- □ Creating a New Presentations
- Opening a Presentation
- □ Entering Text in the Slide Pane
- Switching Between Presentations
- Displaying Information in the Presentation
- Moving Around in the Presentation
- Managing the Slides
- Selecting Text
- Manipulating Text
- □ Checking the Spelling
- Aligning Text
- □ Changing Bulleted Information
- □ Inserting Clip Art Images
- Inserting Shapes
- Creating and Using Tables
- Formatting the Table
- Creating a Chart
- Changing the Background Color
- Printing the Presentation
- □ Running the Slide Show

Sample Question:

- 1. Which of the following key combinations is used to insert a new slide in a presentation?
  - A. <Ctrl>+<N>
  - B. <Ctrl>+<M>
  - C. <Ctrl>+<0>
  - D. <Ctrl>+<X>

2. Which function key is used to run the spelling checker?

- A. <F1>
- B. <F3>
- C. <F5>
- D. <F7>

3. Pressing which key while dragging an object's sizing handle causes the object to grow from the center rather than from an edge? A. <Ctrl>

- B. <Esc>
- C. <Shift>
- D. <Ctrl>+<Alt>

4. Combining two or more shapes or images so they behave as one is called \_\_\_\_\_\_

- A. cooperating
- B. grouping
- C. resizing
- D. ungrouping

5. The Crop to a Shape feature is located in the

- A. Picture Tools Format tab
- B. Home tab
- C. Insert tab
- D. Drawing Tools Format tab

6. In an Excel worksheet, where is the address of the active cell displayed?

- A. Row heading
- B. Status bar
- C. Name Box
- D. Formula bar

7. In an Excel spreadsheet, which of the following characters or symbols signify that the column is too small to fit the number?

- A. 0
- B. #
- C. \*
- D. ?

8. Which of following Excel formulas is the correct representation of an Excel formula?

- A. +B6+B15
- B. =B6+B15
- C. \*B6+B15
- D. &B6+B15

9. In an Excel worksheet, what would result from Sum (A1:A3, B1) if A1=20, A2=30, A3=60 and B1=90?

- A. 400
- B. 300
- C. 200
- D. 600

10. In Excel, the cell reference for cell range from A5 to D10 is represented as

- A. A5, D10
- B. A5: D10
- C. A5. D10
- D. A5- D10

Answer: 1. B; 2: D; 3:A; 4:B; 5: A; 6: C; 7: B; 8: B; 9: C; 10: B

# A B 1 20 90 2 30 3 3 60 4

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# **Living Online**

# **Network**

- □ What is Networking?
- Connecting to a Network
- Benefits of Networking
- Disadvantages of Networking
- Types of Connections

# Internet

- Using Internet
- Understanding Basic Terminology
- □ Using the Uniform Resource Locator (URL)
- Looking at the Home Page
- Understanding the Domain Name Formal
- Using a Web Browser
- Printing a Web Page
- Downloading Information
- □ Customizing the Web Browser
- Using Portal Sites
- Using Search Engine Technology
- □ Narrowing the Search
- Using Boolean Terms
- Evaluating the Information
- □ Having an Impact on Society
- Internet Responsibly
- Managing Spam
- Protecting Yourself
- Risks of Computing
- Protecting Your Data or Computer
- Understanding Data Security

- Establishing a Safe Working Environment
- Using Ergonomics
- Understanding Viruses
- Restricting Access
- Recognizing Copyright Issues
- □ Identifying Ethical Issues
- □ Keeping Up with Technology
- Performing a Data Backup
- □ "Surfing" the Internet
- □ Searching a Specific Web Site

# Email

- Understanding Electronic Mail
- Understanding an E-mail Address
- Looking at E-mail Components
- Using E-mail Options
- Using E-mail Appropriately
- Using Directories
- □ Understanding E-mail Etiquette
- □ Identifying Common E-mail Problems
- Sending Messages
- Receiving Messages
- Attaching Files
- Managing Messages
- Working with the Address Book
- Looking at Mailing Lists

Sample Question:

- 1. What is a Web Browser?
  - A. A software application
  - Β. A program that interprets the coding language of the world wide web
  - C. ISP provider
  - D. internet account
- 2. Which one of the following is not a web browser?
  - A. Internet Explorer
  - Β. Firefox
  - Window Explorer C.
  - D. Chrome
- 3. What does ISP stand for?
  - A. intranet service provider
  - B. internet service provider
  - C. interest service provider
- 4. What is the FTP?

  - A. A computer gameB. A software used for transferring files
  - C. Another name for the Internet
  - D. The part of the Internet that enables information-sharing between pages.

5. What is a URL?

- A. a computer software programB. the address of a document or "page" on the World Wide Web
- C. An acronym for Unlimited Resources for Learning

6. What is the name of the language you use to write a web page?

- A. HTTP
- Β. FTP
- C. URL
- D. HTML

### 7. What is a spider?

- A. A computer virus
- B. A program that catalogs WebsitesC. A hacker who breaks into corporate computer systems
- D. An application for viewing Web site.

8. When a user prints, copies, and distribute s material from the Internet, they are violating the copyright law.

- A. True
- В. False

9. To allow for best security your password should contain a combination of text characters and at least one number when you set up your email account

- A. True
- Β. False

10. It is safe to send any information in an email including social security numbers, credit card numbers, addresses, personal information

- A. True
- B. False

Answer: 1: B; 2: C; 3: B; 4: B; 5: B; 6: D; 7: B; 8: A; 9: A; 10: B

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# **Preparation Materials:**

NR Computer Learning Center provides following options to candidates preparing for an exam:

- Classroom Training
  - <u>Keyboarding</u>
  - <u>Computer Basic</u>
  - <u>Build a computer</u>
  - <u>Microsoft Word 2010 Training</u>
  - <u>Microsoft Excel 2010 Training</u>
  - <u>Microsoft OutLook 2010 Training</u>
  - <u>Microsoft PowerPoint 2010 Training</u>

### • 6 month Online Classes

- o <u>Word 2010</u>
- o <u>Excel 2010</u>
- o <u>Powerpoint 2010</u>
- o <u>Word 2007</u>
- o <u>Excel 2007</u>
- o <u>Powerpoint 2007</u>

## • 6 week Online Instructor led Course

- o <u>Keyboarding</u>
- o Introduction to PC
- o <u>Troubleshooting</u>
- o <u>The Internet Basic</u>
- o <u>Navigating the Internet</u>
- o <u>Basic Computer Literacy</u>
- o Computer Skills for the Workplace
- What's New in Office 2010
- o Introduction to Excel 2010
- o <u>Introduction to Word 2010</u>
- Introduction to PowerPoint 2010
- o <u>PowerPoint 2010 in the Classroom</u>
- Excel 2010 in the Classroom
- Word 2010 in the Classroom
- Introduction to Word 2007
- o <u>Introduction to PowerPoint 2007</u>
- o Introduction to Excel 2007
- o Intermediate Excel 2007

# • Corporate Training

To request for corporate training, visit <a href="http://www.nrclc.com">http://www.nrclc.com</a>

Practice Test

To order practice Test, call (714) 505-3475 or send an email to info@nrrclc.com.

For latest news on technology and information on promotional products, webinars, event, training and event, join our monthly newsletter at <u>www.nrclc.com</u>.



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