

The American University in Cairo

Computer Science Department

CSCI 10602&07

Dr. KHALIL	Quiz-I	Fall 2009
Last Name :		ID:
First Name:		Form – I

EXAMINATION INSTRUCTIONS

Solve only 2 out of 3 questions

- * Do not turn this page until asked to do so.
- * Exam time is **30** minutes.
- * Put the answers on the same question sheet, do not use any additional papers, even for scratch.
- * Write your name, ID, section no. in the indicated places.
- * Read the exam instructions.
- * Read the honesty policy.
- * Sign the following statement.

Academic Integrity Policy

Cheating in Exams is a violation of the Academic Integrity policy of AUC. Whispering, talking, looking at someone else's paper, or copying from any source is considered cheating. Any one who does any of these actions or her/his answers indicates that she/he did any of them, will receive a punishment ranging from zero in this exam to failing the course. If repeated, it may lead to dismissal from AUC.

I have read the honesty policy and exam instructions and I am presenting this exam as entirely my effort.

Signature: _____

DO NOT USE THIS SECTION

Question	Points	Grade
	15	
	15	
Total	30	

Question 1 (15 points)

Tick only the best correct answer for each of the following:

- 1) Internet is:
 - a. A collection of computers and other hardware devices that are connected together to share hardware, software, and data. []
 - b. A system that uses satellites and a receiver to determine the exact geographic location of the receiver []
 - c. Worldwide network of computers connected together through a standard network protocol known as Transmission Control Protocol/Internet Protocol, or TCP/IP. []
 - d. A computer that provides resources to other computers in a network []
- 2) The software that controls and manages the computer resources is:
 - a. Source program []
 - b. Loader []
 - c. Web browser []
 - d. Operating system []
- 3) The part of the computer that temporary stores programs and data to be processed is:
 - a. The CPU []
 - b. ROM []
 - c. RAM []
 - d. ALU []
- 4) A web browser is:
 - a. Software that controls a user's interaction with the computer hardware []
 - b. A graphical user interface that allows users to navigate through the web []
 - c. A software that enables users to edit web pages []
 - d. A computer that provides resources to other computers in a network []
- 5) Von Neumann architecture is:
 - a. A stored-program computer []
 - b. A web browser []
 - c. An architecture for RAM []
 - d. All the above []
- 6) World Wide Web is:
 - a. A collection of computers and other hardware devices that are connected together to share hardware, software, and data. []
 - b. A system that uses satellites and a receiver to determine the exact geographic location of the receiver []
 - c. The largest and most well-known communications network, interconnecting all computer networks all over the world []
 - d. Worldwide network of servers that store collections of specially formatted files known as Web pages. []
- 7) Computer virus is:
 - a. Violation of copyright agreements []
 - b. Code disrupting the computer operations and erasing information []
 - c. A Computer theft or computer fraud []
 - d. A biological disease causing malfunctioning of the computer []
- 8) The Central Processing Unit (CPU) is composed of:
 - a. RAM & ROM []
 - b. Control Unit & Arithmetic/Logic Unit []
 - c. Main Memory & Registers []
 - d. none of the above []
- 9) A Computer Network is:
 - a. A collection of computers and other hardware devices that are connected together to share hardware, software, and data. []
 - b. A system that uses satellites and a receiver to determine the exact geographic location of the receiver []

- c. A software that translates a high-level language program into machine language []
 - d. A computer that provides resources to other computers in a network []
- 10) The Control Unit of a CPU
- a. Executes all arithmetic and logical operations []
 - b. Stores data files and programs []
 - c. Directs the Computer system to execute stored program instructions []
 - d. ALU []
- 11) The Arithmetic/Logical unit
- a. Executes all arithmetic and logical operations []
 - b. Directs the Computer system to execute stored program instructions []
 - c. Is a list of steps for solving a problem []
 - d. None of the above []
- 12) The ALU can execute logical operations, such as
- a. Addition, Subtraction, Multiplication, and Division. []
 - b. Displaying graphics on computer screen. []
 - c. Comparing numbers, letters, or special characters []
 - d. None of the above []
- 13) The main memory
- a. Directs the Computer system to execute stored program instructions []
 - b. Executes all arithmetic and logical operations []
 - c. Also known as RAM and it holds data and instructions for processing []
 - d. none of the above []
- 14) Byte:
- a. A group of 7 bits []
 - b. A group of 9 bits []
 - c. A group of 6 bits []
 - d. None of the above []
- 15) Compiler is:
- a. Software that controls a user's interaction with the computer hardware []
 - b. A graphical user interface that allows users to navigate through the web []
 - c. A software that translates a high-level language program into machine language []
 - d. A computer that provides resources to other computers in a network []

QUESTION 2 (15 points)

Some of the following statements are completely correct while others are partially correct (only part of it that is incorrect). Mark those statements that are correct and try to correct those that are partially correct.

1. The WANs (Wide Area Networks) connect geographically close computers and devices, such as within a single office building, a laboratory, a warehouse, or a campus while Local Area Networks (LANs) span relatively wide geographic areas and are based on interconnected communication facilities in different parts of a country and used as a public utility.
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2. Software Piracy is the acquisition and use of legal copies of software.
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3. Because the source program in a software product is an original work of authorship, it is protected by copyright law. Copyright law protects all original works of authorship against unauthorized copying. Copyright protection means that the owner of the copyright has not the exclusive right to make, use, and/or sell the original work.
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4. The software development method for solving problems using a computer consists of five main steps:
(1) Problem Specification (2) Problem analysis (3) Program design
(4) Program Implementation (5) Program testing
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5. The size of Computer storage is measured in terms of Kilobytes, Megabytes, and Gigabytes, where one Kilobyte = 10^3 Bytes, one Megabyte = 10^6 Bytes, and one Gigabyte = 10^9 Bytes.
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6. RAM (Random Access Memory) is the part of main memory that permanently stores programs or data.
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7. Computers are becoming less expensive and bigger in size.
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8. Programs must be copied into the memory of the computer before they can be executed.
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9. The three categories of programming languages are machine language (meaningful to the computer), high-level language (meaningful to the programmer) and assembly language, which is similar to machine language except that it uses special mnemonic codes for operations and names for memory cells instead of numeric addresses.
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10. A computer can think for itself; a programming language is used to instruct it in a precise and unambiguous manner to perform a task.

QUESTION 3 (15 points)

- 1) A _____ is a list of instructions that enables a computer to manipulate data in order to perform a specific task.
- 2) _____ coordinates all computer operations and performs arithmetic and logical operations of data.
- 3) The RAM (Random Access Memory) stores: _____ and _____ .
- 4) _____ is the internal low-level language of the computer.
- 5) Through the _____, you can issue commands to the computer and manage computer resources.
- 6) A _____ is a program that lets Users display and view a Web document and activate links to other documents.
- 7) _____ is a plastic disk used to permanently store information that is read by optical technology.
- 8) The smallest addressable memory unit is called a _____.
- 9) _____ is the part of main memory that temporarily stores programs, data, and results.
- 10) _____ is the violation of copyright agreements by illegally copying software for use in another computer.
- 11) _____ is a central processing unit packaged in an integrated circuit.
- 12) _____ is an interconnected collection of computers that share resources.
- 13) _____ is an interconnected grouping of computer networks from all over the world; provides access to the World Wide Web.
- 14) _____ is a software that translates a high-level language program into machine language.
- 15) _____ is a code attached to another program that spreads through a computer's disk memory, disrupting the computer or erasing information.

Good Luck