KING FAHD UNIVERSITY OF PETROLEUM AND MINERALS COLLEGE OF COMPUTER SCIENCE AND ENGINEERING *COMPUTER ENGINEERING DEPARTMENT* COE 205 – (Term 061) <u>Quiz #1 Solution</u>

Q.1 (12 points)

What are the three kinds of buses that connect the CPU to the memory and I/O?

- A. Address, Data and Control Buses
- B. CPU, Memory and I/O Buses
- C. Instruction, Address and I/O Buses

Q.2 (10 points)

In a computer system, the main memory is visible to the programmer so that he can store files in it

- A. True
- B. False

Q.3 (12 points)

The CPU has:

- A. Knowledge of which program is being executed
- B. Knowledge of which method or function is being executed
- C. No knowledge of programs or methods whatsoever

Q.4 (15 points)

The fetch-decode-execute cycle is:

- A. What the CPU does all the time
- B. A program that is permanently stored in memory
- C. A special instruction of the CPU

Q.5 (15 points)

A CPU, that has a 13-bits address bus and an 8-bits data bus, is connected to a memory of 32Kbits 16Kbits organized as 2K Bytes. How much memory space (in bytes) is available for a designer to add more memory?

- A. 8K Bytes
- B. 6K Bytes
- C. 4K Bytes

Q.6 (12 points)

The CPU reads instructions from memory

- A. To verify that they are really there
- **B.** To execute them
- C. To learn about their format

Q.7 (12 points)

Memory stores:

- A. Characters only
- B. Real numbers, characters and colors
- C. Any entity represented as one or more binary numbers

Q.8 (12 points)

The term "address" for the memory designates:

- A. The ability to read data from the memory
- B. The number representing the rank of the location in memory by order of importance
- C. The number representing the identifier of the location in memory