

# Daffodil International University

Final Examination

Course Code: CSE 231 Course Title: Microprocessor and Assembly Language

Time: 0720 - 1020 PM

Course Teacher information: Dm. Mehedi Hasan Abid

## PART A: Judge your IQ (Marks: 9)

1. Microprocessor retrieves instructions from:

- A. Control memory
- B. Cache memory
- C. Main memory
- D. Virtual memory

2. Explain An Intermediate Language?

3. Which are the architectural paradigms in microprocessor:

- A. RISC
- B. CISC
- C. PISC
- D. A and B

4. \_\_\_\_\_ is the most important segment and it contains the actual assembly language instruction to be executed by the microprocessor:

- A. Data segment
- B. Code segment
- C. Stack segment
- D. Extra segment

5. \_\_\_\_\_ is usually the first level of memory access by the microprocessor:

- A. Cache memory
- B. Data memory
- C. Main memory
- D. All of these

6. The instructions like MOV or ADD are called as \_\_\_\_\_

- a) OP-Code
- b) Operators
- c) Commands
- d) None of the mentioned

7. \_\_\_\_ Directive specifies the end of execution of a program.

- a) End
- b) Return
- c) Stop
- d) Terminate

8. The small extremely fast, RAM's are called as ?

- A. Cache
- B. Heaps
- C. Accumulators
- D. Stacks

9. Each personal computer has that manages the computer's arithmetical, logical and control activities.

- A. Interpreter
- B. Microcontroller
- C. Assembler
- D. Microprocessor

## PART B

1.  $A = B - A$ , using only mov, add, sub, neg translate high level programming language assignment statements into assembly language, Where A, B is a variable. Before you answer this question please note that start answering question from the last digit of your id number, for an example if your id is 226 then you will start from the 6 number of question then you will start from 1. If you find the 6 number questions is not exist then the marks is bonus you don't need to answer! Thanks for reading carefully!

N: B: You don't need to write the full code, write pseudo code only!

Want to do some practical exercise in Assembly Language? Then let's start! (20)

2. A. Write some code to read characters until input the first character of your name!  
B. Write some code to count the numbers of character in your name?  
C. write a count-controlled loop to display a row of 10 stars in 10 line ex.

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- D. Suppose BX and AX contained sign numbers. Write some code to put the biggest one into CX

E. Do you have problem solving capability? When you face a problem what you do first. Explain the steps of your solving process/ Share an experience of problem or challenge that you have overcome recently.

F. write a program to print your name in a reversing order?

3. Here You need to answer all of the questions and total marks is :: 10

- What is the difference between conditional jump and unconditional jump?
- What is non-mask able interrupt line? Explain briefly.
- What is HLDA? Explain briefly?
- The 250 and 150s had given us such a marvelous movie you were discussing with this topic with your friend suddenly your friend rony asked you what is the summation of 250 and 150, you laughed and huh it's 400 who doesn't know about this, then tricked you no you fool answer me in binary with carry flag, parity flag, signed flag, overflow flag, zero flag, Auxiliary flag this information. If you answer then I will do anything you want me to do. So, now your turn by answering all the questions you can make him assistant for one day of yours!
- Write 4 conditional instructions with examples

**Best of luck leaders!**