

Daffodil International University

MID TERM Examination

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

Time :: 600 - 830 PM

Course Teacher information: Dm. Mehedi Hasan Abid

PART A:: Imagination and AI (Marks :: 10)

1. What would happen if microprocessors were never invented? Describe your imagination
2. Why do we need a general purpose register and segment register? What happens if we don't have them in microprocessors?
3. Is that a problem if we don't write the prototype in the code? If yes/no then please explain
4. Do you know 8086 has three control bits in the flag register which can be set or reset by the programmer? if you know then what are they explain with examples
5. Is assembly language case sensitive? if yes/no please explain briefly

PART B:: Challenge (Marks:: 15) Q1 = 1, Q2 = 2, Q3 = 5, Q4 = 5 and Q5 = 2

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.
N:B: You don't need to write the full code, write pseudo code only!
2. Suppose you are going on a tour with your friends. In the group One of your friends is a very good programmer and you know programming very well so they tricked you and asked you what is the day today? You know today is Sunday but the problem is he asked you to print in Assembly Language! So, Please write down your answer to give him a retreat!
3. You have received an email from google where they invited you for an interview. You must be wondering how they found you. They found your github location where you have so many projects in assembly language. Google recently working on a low level programming language but they are very amateur so they want to hire you to build a project for google where addition and subtraction operations can be performed. So, you are requested to help Google and write code in assembly programming language.

4. The 70 and 80s 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 70 and 80, you laughed and huh it's 150 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!
5. You know how valuable a person you are to your teacher and he believed in you so he asked you to prepare questions for 2 marks that he taught you in the classes and answer them.

Best of luck leaders!