

### **Assignment 3, CF, Fall Semester**

**Deadline:** 19 Nov. 2019

*Assignment should be hand written.*

*Write your name, registration No. and section, or else your assignment may not be marked.*

*Copying is not allowed.*

*Write in your own words.*

*Staple your pages properly (binding is not required).*

1. What are the differences between impact and non-impact printers? Explain the working principles of Dot-Matrix, Laser-Jet and Ink-Jet printers.
2. Select two recent printer models that are currently available in the market. One of them should be ink-jet and the other one a laser-jet printer. Compare the specifications of these printers in tabular form. Which one are you going to suggest to your younger sibling or cousin and why?
3. Draw the block diagram of a processing unit and explain the functionality of the key components of a microprocessor.
4. What is the difference between 1's complement and 2's complement? What is the purpose of using them in computers and data processing?
5. Describe the history of IBM company and give an account of various historical IBM products. What are the products that IBM is still manufacturing? What are main differences between IBM and Freescale processors?