Contribution By: shani kumar Pathak (shani1998)

- **The aim of this subject is it make you aware of functional units of a computer and their internal organizations such as how Input-output interface is being done, how CPU works and memory organization within the computer.**
  1. This is totally a theoretical paper but it is very important from the gate point of view here I am only discussing with semester point of view for gate, contact me personally.
  2. Initially you will feel that, this subject is bit boring but once you start visualizing the concepts which you have learned and connecting them together give you feel and excitement to know how actually computer processing is being done.
  3. *Reference 1*. **Carl Hamacher** Book is the only book which you must have to follow.

…….**From Exam Point of View**…….

- First and most important thing for any exam is that: Download the previous year questions papers and during your preparation focus more on frequently asked questions but also study other portions if you have less time to prepare then at least study frequently asked questions.
  Download co questions: http://dspace.cusat.ac.in/jspui/handle/123456789/11977/simple-search?query=computer+organization
- In my opinion followings are the important topics in each modules which you should cover:

  1. Instruction execution, addressing mode and subroutines.
  2. Bus organization, perform arithmetic and logical operation, Execution of complete instruction, Control Signal, Booth algorithm you may expect numerical questions also.
  3. Cache Memories: Mapping & Replacement algorithm, Virtual memory-Address translation.
  4. Interrupts-vectored interrupts, interrupt nesting, DMA, Basics of pipelining.