

# COAL IMP EXAM QUESTIONS

(as per Sir Shoaib Rauf)

- Q1.** What are the applications and implementations of Assembly Language? (eg. Multimedia in classrooms, A/C unit, flight-control system etc)
- Q2.** Differentiate between Statement & Instruction.
- Q3.** Describe the relationship between High-level language & Assembly language.
- Q4.** Describe the relationship between Assembly language & Machine language. (similarly Low Level language vs Assembly language)
- Q5.** Explain instruction execution cycle (eg. with respect to a given instruction)  
Fetch->Decode->Execute
- Q6:** Debug the instruction to find the values in the registers.
- Q7:** What is a virtual machine and what are its applications? (follow from the slides/book only)
- Q8:** Explain the program-execution cycle.
- Q9.** Define Labels and its types. (Code labels, Data labels)
- Q10.** Examples of no-operand instructions. (STC-set carry, CLC-clear carry, NOP-no operation, LAHF-load status flags into AH, SAHF-save/store AH into status flags)
- Q11.** Access the array by direct offset, indirect offset or index. (Direct- by array name, Indirect - by esi/edi pointer register, Index - ? )
- Q12.** Access the array by ptr instruction etc.