

Review

Note Title

10/20/2011

Chap 1 Intro

basic machine architecture

fetch - decode - execute cycle

Chap 2 Information Representation

Boolean rep.

text rep. ASCII

number rep.

base 2, 16

negative

fixed-point (Q notation)

floating-point (IEEE std 754)

Not responsible for:

§2.1.7 formal alg. and rings

trans. func. in §2.2 (B2Inl.)

§2.3 3-D figs

Chap 3 Machine-Level Programs

Inst. Set Arch (ISA)

x86 ISA (32-bit version)

movq %0, %rax

addressing modes

machine lang inst. (assembly lang)

pointers in C and assembly

arrays in C "

structs heterogeneous data structures

call return sequence

stack frame

C lang

Not respons. de for:

§ 3.14 x86 FP (both editions of text)

§ 3.15 in-line assembly (1st ed.)

Exam:

open book / open notes / no Internet
access

questions come in 2 forms:

1. set of short answer questions
2. set of longer in depth questions