Alan S. Thomas

CSI 130-01CA

Pg. 4-34: 21,23,24,26,28AD,

31ABF,32AC,35AE,36AB,

37AC,39B,40A,41C,42C,44

09/29/2014

21) RAM, cache, and registers are the three types of internal storage mentioned in this section.

a. Registers are the most expensive of the three. Considering the real-estate of working with a processor.

b. RAM is the cheapest of the three mentioned.

23) DRAM utilizes capacitors to store data states. When the capacitor stores a charge it is in the ‘1’ state, when there is no charge it is in the ‘0’ state.

24)SRAM stores information by utilizing four transistors. There’s transistors form a flip-flop which can in turn store a single bit of data.

26) a) Mechanical hard drives.

b) Compact disc.

c) Thumb-drives(EEPROM).

28) a) ‘S’

d) ‘L’

31) a) 27

b) -27

f) -1

32) a) 1100(12)

c) 101111 > 01111. Overflow detected since sign of the answer is incorrect.

35) a)