Circle your short answers please.

1. What does this instruction do: \texttt{xor eax, eax} \textit{sets eax to zero}

2. What are the first three steps in the instruction execution cycle? \textit{fetch, decode, execute}

3. Which of these is not a general-purpose register? EAX, ESI, ESX, ESP

\textit{ESX is not even a register. (ESI and ESP correct in some documentation)}

4. What special purpose does the ECX register serve? \textit{loop counter}

5. What registers point to variables on the stack? ESP, SBP

\textit{Segment registers is not a good answer, and just begs the question, what are the segment registers?}

6. Circle those that are not a bit in the x86 FLAGS register.

\textit{Carry, Sign, Zero, Null, Overflow, Underflow, Reset, Trap, Control, Parity.}

7. Which x86 command pushes the flags register onto the stack? pushf

8. Which flag is set when the result of an unsigned arithmetic operation is too large to fit into the destination? carry

9. Which flag is set when the result of a signed arithmetic operation is either too large or too small to fit into the destination? overflow

10. The term bit is short for what? \textit{binary digit}

11. Convert this binary number to decimal: \texttt{100101} 37

12. What is the 2's complement of binary 1

\textit{I was looking for multiple ones and no zeros. You cannot compute the two's complement of 1 bit. A signed binary number requires at least 2 bits. Here are answers I was looking for: 11 or 1111111111111...}

13. What is the 10's complement of 256?

744 \textit{another acceptable answer: 99999744}

14. Write an x86 function that will return the smallest of three numbers, and use the CDECL calling conventions.

\textit{There was not enough time to do this coding.}

\textit{The student showing us the solution on the board will receive extra credit.}