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## SHEET 6

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Q1. Assume System clock frequency=16MHz. Find the values for the divisor registers of UARTIBRD and UARTFBRD for the following standard baud rates:

(a) 4800 (b) 9600 (c) 57,600 (d) 115,200

Q2. Assume the baud rate is 9600 bits/sec. Show the serial port output versus time waveform that occurs when the ASCII characters "ABC" are transmitted one right after another. What is the total time to transmit the three characters?

Q3. Write a C function to initialize UART0 with baud rate 9600 bits/s, 8 bits word length, no parity, one stop bit, and FIFO enabled.

Q4. Write a C function to check if there is data available to be received by UART0.

Q5. Write a C function to receive one byte using UART0.

Q6. Write a C function to transmit one byte using UART0.

Q7. Write a C program that receives from Device1 a lower-case character and transmits its upper-case to Device2.