CAMC Important Questions

1. What is the RAM capacity in the 8051?

2. Discuss elaborately about the Register Banks and Stack operations?

3. Explain about register banks in 8051 microcontroller.

4. Draw the PSW SFR register.

5. Which code is specifically used for BCD Arithmetic Programming?

6. Justify why Subroutine and ISRs are used in the programming. Show how it is affecting the PC, SP & stack when ISRs and Subroutines are there in the Program?

7. Explain the complete operations with respect to Interrupt, ISR, IVT, High and low priority Interrupts?

8. Explain all the Addressing modes used in 8051 with suitable Examples.

9. What is the conditional requirement to activate TF0?

10. Show the format of SCON register - SFR?

11. Explain in detail about Port 0, Port 1, port 2 & Port 3 of 8051 and how it is assigned for various operations?

12. What is the job of PSW? Explain any 4 special function registers?

13. Design with the microcontroller to double the baud rate in serial communication and show the SMOD register and represent all the double Baud rate comparing with the normal baud rate with a table.

14. What conditional JUMP and Un - conditional JUMP used in the program and focus on subroutine, CALLs, RET & RETI instructions.

15. Write an 8051 C program to toggle all the bits of PORT P1 continuously with some delay in between. Use Timer 0, 16-bit mode to generate the delay.

16. Write IE bits format. Any one example of non- Maskable interrupt?

17. Write a program to generate 10 KHZ square wave at Port 1.0 using Timer 0

18. Analyze the situation in serial communication If the 8051 is at 9600 baud rate and PC communicating in 19200 baud rate – briefly?

19. Defend, why is Serial communication always preferred in 8051 system? What are the points to be considered for effective data transfer? Analyze the status of TI and RI in Serial communication.

20. Create a Program to get an output from P1.3 which is connected to a BUZZER and operates based on the interrupt pin 3.3 (INT1) is connected to a Pulse Generator. Based on the Interrupt program Buzzer should sound.