

Question Bank

a. Description of instructions

- Q1. On what condition JZ quit become true
- Q2. What are the values of RS0 and RS1 of PSW when 19H location is treated as a register?
- Q3. Explain JBC bit, exit instruction
- Q4. Does DA A instruction converts binary number to BCD number? Explain under what conditions the BCD numbers gets adjusted after BCD addition
- Q5. Differentiate between RET and RETI instructions
- Q6. What are program branch ranges of SJMP, AJMP and LJMP instructions?

b. Assembly Directives

- Q1. List all the header files required to cross compile C program
- Q2. Using the directives initialize a Look Up Table

c. Algorithms with 8051 assembly language programs

- Q1. Write an 8051 assembly program to check a byte is a palindrome. Palindrome is a byte or a word or words when read left or right it will be the same. Like for e.g. C3H (11000011b) or MALAYALAM.
- Q2. Write an 8051 assembly program to produce a software delay of 1 minute.
- Q3. Write an 8051 assembly program to multiply two 16 bit numbers, using shift left and add algorithm
- Q4. Write an 8051 assembly program to compute the square root of a 16 bit number using shift left and subtract method
- Q5. Write an 8051 assembly program to find LCM of two 16 bit numbers.
- Q6. Write an 8051 assembly program to search a key in an array of 16 bit numbers using Binary search algorithm