Important Question's

Check Important Question with Answer Video On [YOUTUBE] (Click here)

BLOCK 1

Ques. 1 What is Von-Neumann architecture ?

Ques. 2 Explain the use of PC, IR, AC, MBR registers of the computer system ?

Ques. 3 Perform the following operations using 8bit signed 2's complement notation ?

(-56) + (-72)

(-73) + 84

Ques. 4 IEEE-32 bit floating-point representation for a single-precision number uses the format as :

- Sign (bit 1)bit biased exponent (8 bits) Significant (23 bits)
- Using this format represent the following decimal numbers:
- 0.250
- 8
- Now using the representation perform the following operations:
- 0.250 + 8
- 0.250 * 8

Important Question's

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BLOCK 1

Ques. 5 Explain the use of parity bit in error detection and correction code with the help of an example using an odd parity scheme ?

Ques. 6 Using Hamming code, what should be the length of the error detection code that detects the error in one bit for 8 and 16-bit data respectively ?

Ques. 7 Simplify the following using Karnaugh's map(K-map) ?
F (A, B, C, D)=E(0, 1, 3, 5, 8, 10, 13)
Also, draw the logic circuit for the simplified expression

Ques. 8 Explain the design of a 4*1 multiplexer ?

Ques. 9 Explain the construction of a full adder using a half adder ?

Ques. 10 Write the characteristic table and excitation tables for the following ?

- JK Flip-Flop
- D Flip-Flop

Important Question's

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BLOCK 2

Ques. 1 How many RAM chips of size 512 * 8 bit are needed to design a memory of 1M * 32bit ?

Ques. 2 What is RAID? List three features of RAID level 3 ?

Ques. 3 Explain the programmed I/O with the help of a flow chart ?

Ques. 4 What is DMA? Draw and explain the block diagram of a DMA controller ?

Ques. 5 Explain the working of CD-ROM and DVD-ROM with the help of a block diagram ?

Important Question's

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BLOCK 3

Ques. 1 Explain the Instruction fetch with the help of micro-operations ?

Ques. 2 The 8-bit registers R1, R2, R3, and R4 initially have the following values :

- R1 = 00001111
- R2 = 11110000
- R3 = 11001100
- R4 = 10101010
- Determine the 8bit values in registers after the execution of the following sequence of micro-operations:
- R1 <- R2 + R3 Exclusive OR.
- R1 + R2 – R3 Subtract R3 from R1

Ques. 3 Write a short note on instruction pipelining ?

Ques. 4 List any three characteristics of RISC architecture ?

BLOCK 3

Ques. 1 Write a program in 8086 assembly language that counts the number of characters in a string stored in the data segment ?

Ques. 2 Discuss the use of Interrupt Vector Table (IVT) in handling interrupts for 8086 microprocessor ?

Important Question's

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SOME IMPORTANT TOPICS

- Why should we learn assembly language?
- Convert decimal number 65.41 to binary?
- Point out the error in the following 8086 assembly instruction(if any)?
- PUSHF AX
- MOV AX,BX
- XCHG MEM_WORLD1,MEM_WORD2
- AAA BL, CL
- IDIV AX, CH