OCTOBER 2013

Q1 (A) Select the correct alternative and rewrite the following. **(4)**

(a) Micro-controller 8085 has _____ bytes of Ram
(i) 64 (ii) 128 (iii) 256 (iv) 32

(b) _____ flag is affected in CMA instruction.
(i) All (ii) No (iii) Carry (iv) Zero

(c) Micro-processor T8190 is a _____ bit micro-processor.
(i) 4 (ii) 8 (iii) 12 (iv) 16

(d) _____is a set of rules and formats for sending and receiving data in a network.
(i) interface (ii) frames (iii) protocols (iv) access method

Q1 (B) Answer any two of following **(6)**

(a) Explain functions of 8085 micro-processor pins:
(i) Reset out ii) ALE iii) TRAP

(b) Explain the following 8085 instructions:
(i)XTHL (ii) DAA

(c) Define micro-controllers and state its advantages over micro-processor based system.

Q2 (A) Answer any two of the following. **(6)**

(a) Write a short note on evolution of micro processor giving one example of each generation.

(b) Explain conditional and unconditional RET instruction of micro-processor 8085.

(c) Differentiate between UTP and STP cable

Q2 (B) Answer any one of the following. **(4)**

(a) Differentiate DAD and ADD instruction of 8085 micro-processor

(b) Draw and explain programming model of 32-bit version of alpha-86 family.

Q3 (A) Answer any two of the following. **(6)**

(a) State any three features and applications of 8051 micro-controller.

(b) Define addressing mode of 8050 and explain any two of them with example.

(c) Explain concept of TCP/IP protocol.

Q3 (B) Answer any one of the following. **(4)**

(a) What is interrupt? Differentiate between hardware and software interrupt.

(b) Explain memory map of8051.

Q4 (A) Answer any two of the following. **(6)**

(a) Differentiate between PUSH and POP.

(b) If accumulator contains the data 23H and B register contains 35H.what will be the contents of accumulator. After execution of each of the following instructions independently. (i)XRA (ii)ANI FOH (iii)CPI OAH

(c) Explain the following wireless media in detail. (i)microwave (ii) infrared

Q4 (B) Answer any one of the following. **(4)**

(a) Define access method. Explain contension access method and token passing assess method

(b) Explain modem and HUB in detail.

Q5 (A) **Answer any two of the following** **(10)**

(a)

Write assembly language program to count the number of times data 7EH is found in a block of memory location starting from 3000H. length of block is stored in location 2FFFH. Store the result in location 2000H.

(b)

Write a program in assembly language that multiply two 8-bit numbers stored in memory location D00H and D001H. stored in two byte result in consecutive memory locations starting from D002H.

(c)

Write a program in assembly language that converts a hexadecimal numbers stored at C030h to its BCD equivalent. Store the BCD result in C031H onwards (AFH=0175 BCD).

OR

Q5 (B) **Answer any two of the following** **(10)**

(a)

Write a program in assembly language that divides two one byte hex numbers where dividend is stored in memory location C00H. store quotient and reminder in memory location COO2H and C003H respectively.

(b)

Write an ALP to calculate sum of series of number. The length of the series is in memory location C101H and series itself begins in memory location C101H.assume sum to be an 8-bit NO. store result in c204h.

(c)

Write an assembly language program to find 2's complement of five numbers stored from memory location C030H and onwards. Store the result from memory location DOOOH.