PVG's
Muktangan English School & Jr. College, Pune - 9
Preliminary Examination (2024-25)
STD XII

Subject : Computer Science (Paper - II)   Marks - 50
Date : 09.01.2025   Time : - 8.15 - 11.15 am

Q1.   A)   Select the correct alternative & rewrite the sentence   (4)

1)   _____ cable uses light signals to transmit data.

   a) Fibreoptic   c) VTP

   b) Coaxial   d) STP

2)   _____ instruction is used for 16 bit addition

   a) ADD   c) ADC

   b) ADI   d) DAD

3)   _____ bus is one way data path from MPU to all devices.

   a) data   c) Control

   b) Address   d) None of the above

4)   _____ device used for modulation & demodulation.

   a) Hub   c) Modem

   b) Router   d) Repeter

Q.1   B]   Answer any two of the following   (6)

1)   Write a short note on MODEM

2)   Draw a neat labled functional block diagram of 8085 microprocessor.

3)   Define the following terms with suitable diagram

   a) Instruction cyle

   b) Machine cyle

   c) T- State

Q.2 A] **Answer any two of the following** (6)

    1) Explain conditional and unconditional branching instructions with suitable example.

    2) Write a short note on " Evolution of Microprocessor".

    3) Explain LAN, MAN and WAN.

Q.2 B] **Answer any one of the following** (4)

    1) Compare Coaxial cable with Twisted pair cable.

    2) Explain the following instructions with suitable example

       a) DAA

       b) SHLD

Q.3 A] **Answer any two of the following** (6)

    1) With the help of suitable example, explain direct & immediate addressing modes in 8085.

    2) Write a short on unshielded twisted pair cable with its characteristics.

    3) Compare microprocessors 8085 with microprocessor 8086.

Q.3 B] **Answer any one of the following** (4)

    1) Explain Hub and Repeater in detail

    2) List any six major features of 8051 microcontroller.

Q.4 A] **Answer any two of the following** (6)

    1) Explain the following instructions with example

       a) MVI

       b) LDAX

    2) State and explain any three addressing modes of 8085 microprocessor with one example each.

    3) Define Bus, Ring & Star topoligies with labled diagram.

Q.4 B] Answer any one of the following   (4)

1) Draw bit pattern of flag register and explain the significance of each bit.

2) Write any four advantages of Fibre Optic Cable.

Q.5 A] Answer any two of the following   (10)

1) Write an assembly language program to transfer a memory block starting from 1050 H to 1059 H a new block starting from 1070H to 1079H.

2) Write an assembly language program to add 2 decimal number stored at 1050H and 1051H store the result at 1052H and 1053H.

3) A block of data is stored in memory location 4501 H and onwards. The length of block is stores in memory location 4500 H. Write an assembly language program to find the sum of block of data. Store the two byte reslut from memory location 4600 H.

OR

Q.5 B) Answer any two of the following:-   (10)

1) Write an assembly language programme to perform the multiplication of two eight bit numbers where multiplcation is stored at memory location 2501 H and 2502 H, multiplier is stored at 2503 H Result is to be stored at memory location 2504 H and 2505 H.

2) Write an assembly language program to subtract the number stored in memory locationn 3601 H from the number stored in memory location 3600 H. Store the positive result at location 3602 H.

3) A block of data is store in memory staring from memory location 2500 H. Write an assembly language program to sort the contents of block in ascending order.

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