



SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University,
Chennai Accredited by NAAC-UGC with 'A++' Grade (Cycle
III) &

Accredited by NBA (B.E - CSE, EEE, ECE, Mech & B.Tech.IT)



DEPARTMENT OF ELECTRICAL & ELECTRONICS

ENGINEERING

19EEB303 / Microcontroller and its Applications

QUESTION BANK

UNIT I: INTRODUCTION

Part A – 2 Marks

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| 1) What is the processing element inside the microprocessor? What process it does? | [NOV/DEC 2014] |
| 2) How many memory locations can be addressed by 8086 microprocessor? | [NOV/DEC 2014] |
| 3) If the stack segment register contains 3000 _H and the stack pointer register contains 8434 _H , what is the physical address of the top of the stack? | [NOV/DEC 2014] |

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- 4) What do you mean by addressing modes? [MAY/JUN 2014]
 - 5) Give the operation of CBW and TEST instructions of 8086? [NOV/DEC 2013]
 - 6) What is the function of parity flag? [NOV/DEC 2013]
 - 7) How 16-Bit address is converted into 20-Bit address in 8086? [NOV/DEC 2013]
 - 8) Name the hardware interrupts of 8086. [MAY/JUN 2013]
 - 9) What address in the interrupt vector table, are used for a Type-2 interrupt in 8086? [NOV/DEC 2012]
 - 10) Why do we use macros? [NOV/DEC 2012]
 - 11) What are called assembler directives? Give two examples. [MAY/JUN 2012]
 - 12) What is BIOS function call in 8086 Microprocessor? [MAY/JUN 2012]
 - 13) Explain the coordination between BIU and EU.
 - 14) If $BH = 0F3_H$, what is the value of BH in hex after the instruction SAR BH, 1.
 - 15) If $AL = 78_H$ and $BL = 73_H$, explain how DAS instruction (after subtracting BL from AL) adjusts to the BCD result.
 - 16) Draw the 8086 flag register format.
 - 17) Why AAD is to be executed before DIV instruction while converting unpacked BCD to Binary number?
 - 18) List the pointer and index registers of 8086 architecture.
 - 19) Identify the addressing modes involved in the following 8086 instructions: MOV AX, 0005H; MOV AX, 50H [BX][SI].
 - 20) Give the significance of Interrupt flag in 8086 processor.
 - 21) Give a note on the use of auxiliary carry flag.
 - 22) What do you mean by Non Maskable Interrupt?
 - 23) List the different flags affected by the arithmetic and logic operations.
 - 24) Draw the contents of the stack and the registers after a PUSH instruction.
 - 25) What is an interrupt service routine?
 - 26) What is storage space required to store the interrupt vectors of 8086?
 - 27) What is pipelined architecture?
 - 28) What are the maximum address space and data bus width of 8086 processor?
 - 29) Mention the addressing modes of the following 8086 instructions: MOV AL, disp[BX]; MOV AH, disp[BX], [SI]