Roll No. ☐☐☐☐☐☐☐☐☐☐☐   Total No. of Pages : 02

Total No. of Questions : 18

B.Tech.(CSE/IT) (2012 to 2017)
(Sem.–4)
MICROPROCESSOR & ASSEMBLY LANGUAGE PROGRAMMING
Subject Code : BTCS-404
M.Code : 56607

Time : 3 Hrs.   Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :
1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

SECTION-A

Explain the following :

1) Specify the number of registers in a 2K memory chip.

2) What is a bus?

3) What is the function of WR signal on the memory chip?

4) What is a flag?

5) What is the function of ALE signals of 8085 microprocessor?

6) Write an instruction to clear the accumulator.

7) What is an ASCII code'?

8) Name four categories of 8085 instructions that manipulate data.

9) Why data bus is bidirectional?

10) Name the two 8085 signals that are used to latch data in an output port?

SECTION-B

11) Specify the output at PORT1 if the following program is executed :

MVI B,82H

MOV A,B

MOV C,A

MVI D,37H

OUT PORT1

HLT

12) Explain different addressing modes used in 8085 microprocessor.

13) Explain in detail about Microprocessor controlled temperature system.

14) Explain in detail the process of Direct Memory Access (DMA).

15) Explain the various flags in 8085 microprocessor.

SECTION-C

16) A set of eight data bytes is stored in memory locations starting from XX70H. Write a program to subtract two bytes at a time and store the result in a sequential order in memory locations starting from XX70H.

Data (H) F9, 38, A7, 56, 98, A2, F4, 67

17) a) Explain various Registers present in 8085 microprocessor.

b) What are hardware interrupts present in 8085 microprocessor?

18) Describe the functional block diagram of 8085 in detail.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.