

Roll No.

OLE-3227

B. Tech. 5th Semester (CSE) Examination – April, 2021

MICROPROCESSOR

Paper : ESC-CSE-301-G

Time : Three Hours]

[Maximum Marks : 75

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt *five* questions in all, selecting *one* question from each Unit. Question No. 1 is *compulsory*. All questions carry equal marks.

1. (a) Describe the function of SP and PC register of 8085 microprocessor.
- (b) What do you understand by pipelining ?
- (c) Explain DAA instruction using an appropriate example.
- (d) Describe CWR of 8255 briefly.
- (e) What do you understand by handshake signals ?

- (f) Define opcode and operand, and specify the opcode and operand in the instruction MOV H,L.

2.5 × 6 = 15

UNIT – I

2. (a) Explain the demultiplexing of AD₇-AD₀ in 8085 with the help of neat diagram. 7.5
- (b) Explain in detail the pin diagram of 8085 microprocessor. 7.5
3. (a) Write a program to find the largest number among five numbers. Considering the numbers are at memory locations from 2051H to 2055H and save the result at memory location 3050H. 7.5
- (b) Explain the logical instructions of 8085 microprocessor with the help of appropriate examples. 7.5

UNIT – II

4. (a) Explain the concept of segmented memory. What are its advantages? 7.5
- (b) Draw and discuss flag register of 8086. 7.5
5. (a) Explain the addressing modes of 8086 with suitable examples. 7.5
- (b) Explain the function of BIU and EU of 8086. 7.5

UNIT – III

6. (a) Draw and discuss the read and write cycle timing diagrams of 8086 in minimum mode. 7.5
- (b) Explain the assembler directives and operators of 8086 with suitable examples. 7.5
7. Write a program to move a byte string, 16 bytes long, from the offset 0200H to 0300H in the segment 7000H. Use string instructions. 15

UNIT – IV

8. (a) Explain the block diagram of Intel 8255 in detail. 7.5
- (b) Explain the BSR mode of operation of Intel 8255. 7.5
9. (a) Explain the block diagram and operation of Intel 8259 in detail. 7.5
- (b) Explain the block diagram of Intel 8253. 7.5
