Roll No. | | | | | | | | | | | | |

Total No. of Pages : 02

Total No. of Questions : 18

B.Tech (Electronics & Electrical Engg.)/
(Electrical Engineering & Industrial Control) (2012 to 2017)

B.Tech.(EE)/(Electrical & Electronics Engg.) (2012 Onwards)

B.Tech (EE) (PT) (Sem.–5)

MICROPROCESSORS

Subject Code : BTEE-503

M.Code : 70556

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

Answer briefly :

1. How does the microprocessor differentiate between data and instruction?
2. Discuss the function of various flags of 8085.
3. Define Instruction Cycle and machine cycle.
4. Give steps involved to fetch a byte in 8086.
5. What is an USART?
6. What is masking and why it is needed?
7. List the operation modes of 8255.
8. What are the predefined interrupts in 8086?
9. What is the purpose of segment registers in 8086?
10. What is the function of DMA address register?

SECTION-B

11. With suitable examples, explain how I/O devices are connected using memory mapped I/O and peripheral I/O?

12. Draw the pin diagram of 8086 CPU with its control signals.

13. Explain the block diagram of the 8279 interface and its operations.

14. Write an assembly language program to find out the largest number from a given array of 8 bit numbers.

15. Write an assembly language program to generate an accurate time delay of 100ms.

SECTION-C

16. Explain the block diagram of the 8155 I/O section and timer.

17. What is the use of addressing modes, mention the different types of addressing modes with suitable examples?

18. Draw and explain the internal architecture of 8086 microprocessor. Also differentiate between minimum and maximum modes.

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.