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Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (AI&DS/CE/CSE/FT) (Sem-6)
MICROPROCESSORS AND MICROCONTROLLERS

Subject Code : BTEC-402-18

M.Code : 79382

Date of Examination : 17-12-2024

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

1. Write briefly :

- a) What is the significance of clock signals in microprocessor?
- b) Give an advantage of microcontroller over microprocessor.
- c) What is virtual memory?
- d) Draw flag status register of 8085 microprocessor.
- e) What is the importance of semiconductor memories?
- f) Differentiate between DRAM and SRAM.
- g) Enlist arithmetic instructions in microcontroller.
- h) What do you mean by serial interfacing in microcontroller?
- i) What is stepper motor?
- j) Explain LCD.

SECTION-B

2. Explain accessing memory using addressing modes in 8051.
3. Write a program to find 2's complement of 16 bit number in 8085.
4. Write a program to find largest of two 8 bit numbers in 8051 microcontroller.
5. Generate PWM using 8051 microcontroller.
6. Explain I/O port programming in 8051 microcontroller.

SECTION-C

7. Explain program status word, register bank selection, data point register in microcontroller.
8. Draw and explain memory organization.
9. Interface general and matrix keyboards with 8051 microcontroller.

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.