

Roll No.

[illegible]

Total No. of Pages : 02

Total No. of Questions : 09

B.Voc (Hardware & Networking) (Sem.-5)

MICROPROCESSORS AND MICROCONTROLLERS

Subject Code : BVHN-503-18

M.Code : 78634

Date of Examination : 16-12-22

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) Machine Language
 - b) Opcode
 - c) RISC
 - d) RESET pin
 - e) Carry flag
 - f) RAM
 - g) Operand
 - h) T-state
 - i) Address Bus
 - j) RIM.

SECTION-B

2. What is subroutine? Explain with help of example.
3. Explain the functions of DAD, RAL, JMP, CALL instructions of 8085.
4. Differentiate between instruction, machine and clock cycle.
5. Write an assembly, language program to swap two numbers.
6. What is address mode and effective address? Explain in detail.

SECTION-C

7. Draw and explain the timing diagram of OUT instruction.
8. Explain how traffic light system can be interfaced with 8085.
9. Write a detailed note on DMA controller and its architecture.

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.