END SEMESTER EXAMINATION
SEMESTER- V

COURSE CODE :EE-507 /EEE-504 **DURATION : 3 (THREE)HRS**
COURSE TITLE :MICROPROCESSOR, MICROCONTROLLER & ITS APPLICATION **MAXIMUM MARKS : 75**
PASS MARKS : 35 %
SESSION : JULY-DECE'2021

NOTE: *1. All the questions are compulsory*
2. Attempt any 5 (five) questions.
3. Mark for each question is shown against it.
4. Assume suitable logical data wherever necessary.

1.	**(a)**	Write a short notes on: (i) Microcomputer (ii) Microprocessor (iii) Microcontroller	**(3x2)**
	(b)	Explain the hardware and software interrupts of 8085 microprocessors. Give examples from each type of interrupts	**(6)**
	(c)	Explain what is T-state?	**3**
2.	**(a)**	Explain the pin configuration of 8085 microprocessor with its neat diagram	**(10)**
	(b)	Distinguish between Static and Dynamic RAM	**(5)**
3.	**(a)**	Write a short notes on (i) Binary number system (ii)Hexadecimal number system (iii) ALU	**(3x3)**
	(b)	With a neat diagram, explain all the five types of microprocessor flags	**(6)**
4.	**(a)**	Give a description of the following (i) Instruction code (ii) the need for assembly language	**(2x2.5)**
	(b)	Explain the memory read cycle and memory write cycle of memory interfacing with its diagram	**(5)**
	(c)	Distinguish between the Instruction cycle and the Machine cycle	**(5)**
5.	**(a)**	Define what is an instruction? Write the instruction format with its suitable examples	**(5)**
	(b)	Write8085 assembly language program to add two byte numbers	**(4)**
	(c)	Write an assembly language program instructions to move a data by (i) by immediate addressing (ii) register to memory (iii) memory to register	**(3x2)**
6.	**(a)**	Distinguish between I/O mapped I/O and memory mapped I/O interfacing with microprocessor	**(6)**
	(b)	Explain the logic & branch group of instruction of 8085A	**(6)**
	(c)	Explain about the system memory with examples	**(3)**
7.	**(a)**	Describe various addressing modes of 8085 microprocessor	**(5)**
	(b)	Write down the main features of 8085 microprocessor	**(5)**
	(c)	Briefly explain Interrupts and basic techniques of data transfer in the microprocessor	**(5)**
8.	**(a)**	Write an assembly language program to multiply two 8 bit numbers	**(4)**
	(b)	Explain the architecture of 8255 microprocessor	**(6)**
	(c)	What is an instruction? Explain one byte instruction, two byte instruction and three byte instruction	**(5)**