



ACE
Engineering College
(With a Difference in Excellence)
An AUTONOMOUS Institution

Question Paper Code:

IT304ES

ACE-R20

Semester Supplementary Examination
II B. Tech- I Semester- SEPTEMBER-2022
COMPUTER ORGANIZATION AND MICROPROCESSOR
(Information Technology)

Time: 3 Hours

Max. Marks: 70

H. T. No

Answer any 5 Questions out of 8 Questions from the following

Q.No	Question	Marks
1. a)	Describe the operational concepts between the processor and memory	7
b)	Mention four types of operations to be performed by instructions in a computer.	7
2. a)	Explain the different functional units of a computer.	7
b)	Draw and explain the connection between memory and processor with the respective registers	7
3. a)	Construct the flag register in 8086 with neat diagram?	7
b)	Evaluate how registers are organized in 8086 microprocessor?	7
4. a)	Explain the shift and rotate operation with examples	7
b)	Examine the function of following instructions. i) MOV BX,[1234H] ii) ADC AX,BX	7
5. a)	Define an addressing mode .Explain the following addressing modes, with example for each i) Index addressing mode ii)Indirect addressing mode	7
b)	Explain the Stack structure of 8086?	7
6. a)	List the different systems used to represent a signed number and give one example for each. Specify which number representation system is preferred in a computer and why?	7
b)	Discuss the Booths multiplication algorithm with example.	7
7. a)	Show with diagram the memory hierarchy with respect to speed, size and cost	7
b)	Explain direct memory mapping technique	7
8. a)	Explain about Asynchronous data Transfer?	7
b)	What are interrupts ?Explain Different types of interrupts	7