![ACE Engineering College logo]

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

Question Paper Code: | IT304ES | | ACE-R20

Semester End Examination
II B. Tech- I Semester- MARCH-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	Description	Marks
1. a)	Explain the block diagram of a computer?	4
b)	Draw necessary diagrams and explain the control signal generation using microprogrammed control unit?	10
2. a)	Draw the Architecture of 8086 microprocessor. Explain in detail the functional blocks of Bus Interface Unit and Execution Unit?	7M
b)	Explain addressing modes of the 8086 microprocessors?	7M
3. a)	Write an ALP to find sum of numbers in array using 8086 Assembly program?	9M
b)	What are hardware and software interrupts of 8086?	5M
4. a)	With a neat flowchart, explain Booth's multiplication algorithm?	7M
b)	How floating point number is represented in arithmetic operations. Explain in detail.	7M
5	How input output processor is communicated with CPU. Explain in detail.	14M
6. a)	Explain hierarchy in memory organization?	4M
b)	Explain about Direct, Associative and set Associative memory?	10M
7. a)	Explain about Vector processing?	7M
b)	Explain short notes on Array processors?	7M
8. a)	What are different operations in 8086 used for accessing stack?	4M
b)	Explain about pipelining?	10M